

DOCUMENT DATA FORM

Your Name: Nick Carin

Document Title or Description (max. 254 characters): Circle: Same as cover (or fill in below)

Drawing book 8, Chapter 2: Typical sections and details for concrete floor slab

Include work order no. and floor no. if applicable

Roll # DB03

Doc. ID (report #, dwg. #):

Document Date:

1968-70

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SHC&R

KEYWORDS - HIGHLIGHT ALL THAT APPLY

|                |                       |                          |                           |     |
|----------------|-----------------------|--------------------------|---------------------------|-----|
| <b>Level 1</b> | Bankers Trust         | Project 4                | WTC 1 - North Tower       | Add |
|                | Below Grade           | Project 5                | WTC 2 - South Tower       |     |
|                | Concourse             | Project 6                | WTC 3 - Marriot Hotel     |     |
|                | Electrical Substation | Project 7                | WTC 4 - South Plaza Bldg. |     |
|                | Liberty Plaza         | Project 8                | WTC 5 - North Plaza Bldg  |     |
|                | PATH Station          | WFC 1 - Oppenheimer Dow  | WTC 6 - Customs House     |     |
|                | PATH Terminal         | WFC 2 - Tower B          | WTC 7                     |     |
|                | Project 1             | WFC 3 - American Express | WTC Complex               |     |
|                | Project 2             | WFC 4 - Tower D          | WTC Plaza                 |     |
|                | Project 3             |                          |                           |     |

|                |                          |                 |                            |                    |
|----------------|--------------------------|-----------------|----------------------------|--------------------|
| <b>Level 2</b> | Accident analysis & risk | Fire protection | Misc. Performance Problems | Structural         |
|                | Architectural            | Fire service    | News coverage              | Tenant alterations |
|                | Data request             | Landscaping     | Police                     | Tenant Space       |
|                | Emergency management     | Management      | Security                   | Add                |
|                | Evacuation               | Mech./elec.     |                            |                    |

|                |                       |                      |                          |                   |                |
|----------------|-----------------------|----------------------|--------------------------|-------------------|----------------|
| <b>Level 3</b> | 1993 explosion        | Cranes               | Frame                    | Roof              | Weight         |
|                | A/E fitout            | Criteria             | Frame analysis           | Safety            | Weld detail    |
|                | A-242                 | Dampers              | Frequency                | Schedule          | Weld size      |
|                | A-36                  | Debris               | Fuel                     | Sculpture         | Welding        |
|                | A-497                 | Deck                 | Furniture layout         | Security system   | Wind           |
|                | Aircraft impact       | Deflection           | Generators               | Shear knuckle     | Windows        |
|                | Air cooled condensers | Demolition           | Guidelines               | Shear test        | Yield strength |
|                | Analysis              | Design               | Gypsum board             | Shear Stud        | Add            |
|                | Angles                | Detailing            | Hat truss                | Shop drawings     | Drawing books  |
|                | Antenna               | Doors                | Human comfort            | Shortening        |                |
|                | Artifacts             | Drawings             | HVAC                     | Slab              |                |
|                | Asbestos              | Eastern States Steel | Index                    | Sturry wall       |                |
|                | Base plate            | Egress               | Inspection               | Smoke control     |                |
|                | Beams                 | Elevator             | Insulation               | Smoke test        |                |
|                | Bid documents         | Elevator Shaft       | Job number               | Spandrel beam     |                |
|                | Bid Invitation        | Emergency            | Joist                    | Specifications    |                |
|                | Bow tie               | communications       | L-50                     | Splices           |                |
|                | Bracing               | Equipment            | Lighting                 | Sprinkler         |                |
|                | Bridging truss        | Erection marks       | Loads                    | Stability         |                |
|                | Building code         | Errors & Omissions   | Maintenance              | Stairways         |                |
|                | Calculations          | Escalator            | Marking                  | Standards         |                |
|                | Carpet                | Expansion joint      | Mesh reinforcement       | Steel             |                |
|                | Ceilings              | Exterior columns     | Mill inspection          | Steel composition |                |
|                | Certification         | Fabrication          | Model                    | Stiffness         |                |
|                | Chillers              | Family member        | Mullion                  | Structural review |                |
|                | Cladding              | Field survey         | Operations               | Surveillance      |                |
|                | Collapse              | Fire alarms          | Paint                    | Survey            |                |
|                | Columns               | Fireproofing         | Partition layout         | Survivor          |                |
|                | Communication systems | Fire spread          | Partitions               | Tenant list       |                |
|                | Composite truss       | Fire testing         | Photos                   | Tenant occupancy  |                |
|                | Computer output       | Firetower            | Pipes                    | Testing           |                |
|                | Computer program      | Flag Pole            | Plumbing                 | Tie               |                |
|                | Concrete              | Flammability         | Prestressing             | Tolerances        |                |
|                | Connections           | Floor                | Probability, uncertainty | Transfer Girders  |                |
|                | Construction          | Floor load           | Quality control          | Triad             |                |
|                | Contract              | Floor slab           | Ramp                     | Truss             |                |
|                | Core beams            | Floor system         | Reinforcing              | Vestibule         |                |
|                | Core columns          | Floor trusses        | (strengthening)          | Vibration         |                |
|                | Corrosion             | Formwork             | Renovation               | Walls             |                |
|                | Cracking              | Foundations          | Repair                   | Water supply      |                |
|                |                       | Fracture             | Research & Development   | Weather           |                |

WTCI-1062-LERA

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Structural & Civil Engineers

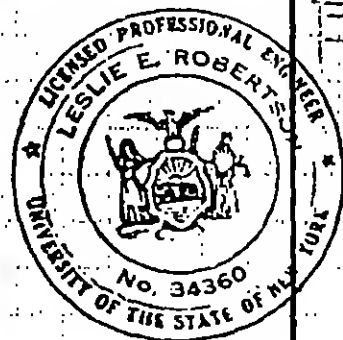
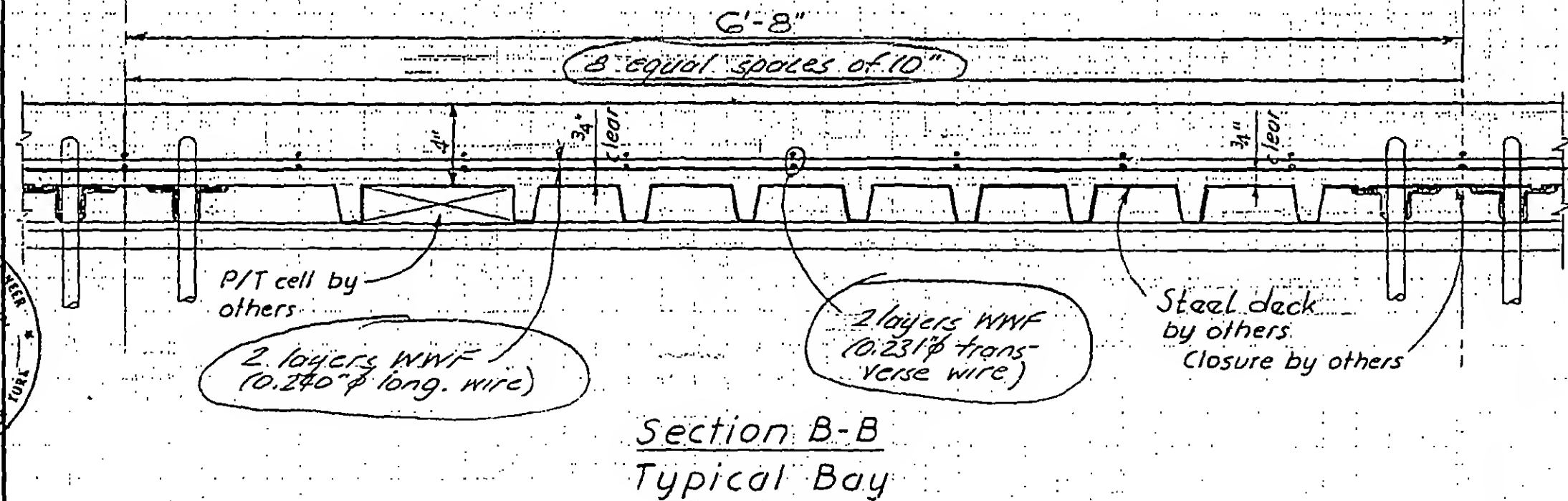
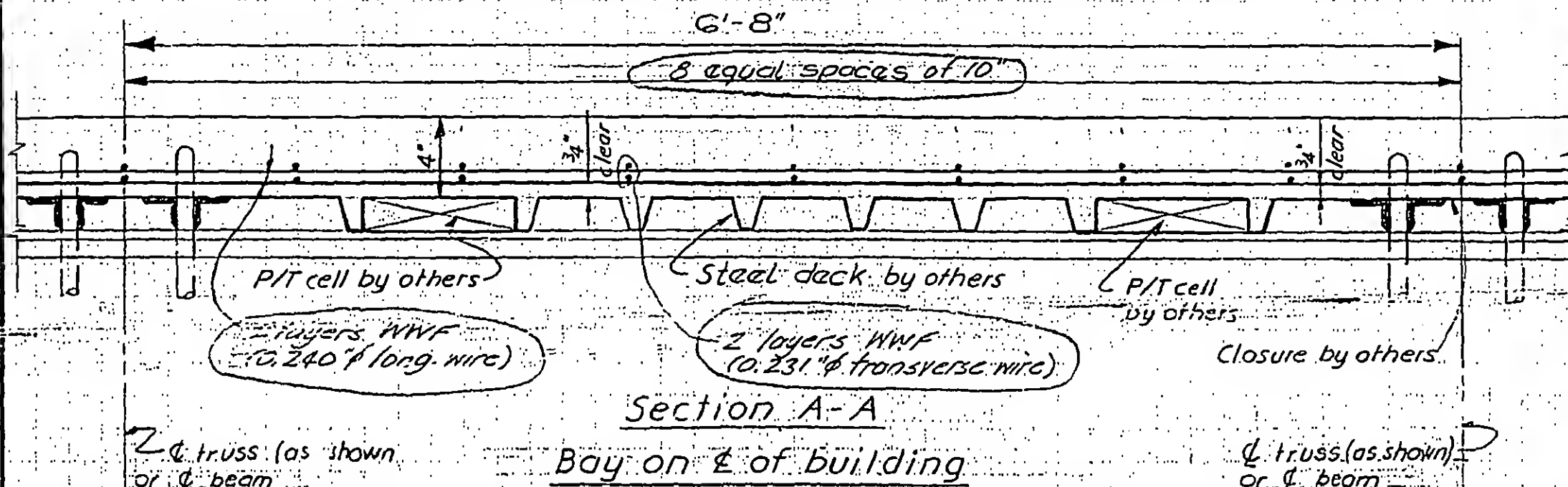
PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL SECTIONS - 4" SLAB ON STEEL DECK

DATE 3-1-68

REVISIONS

8/27/69

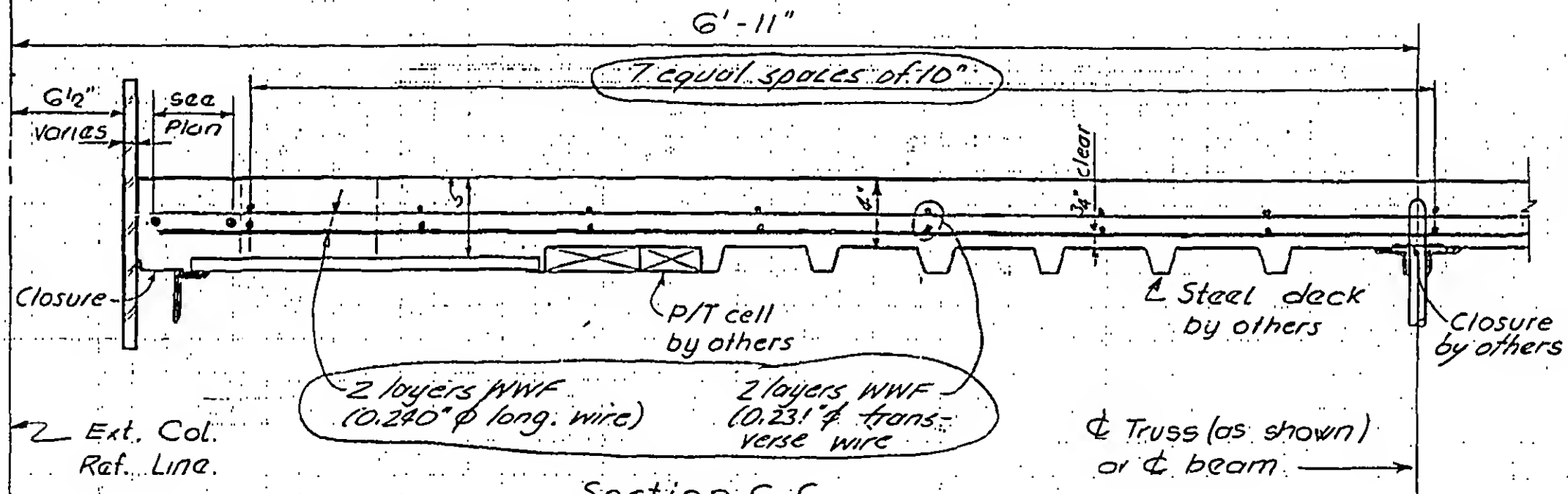


CURB

8-ABQ-21

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Section C-C  
Edge bay



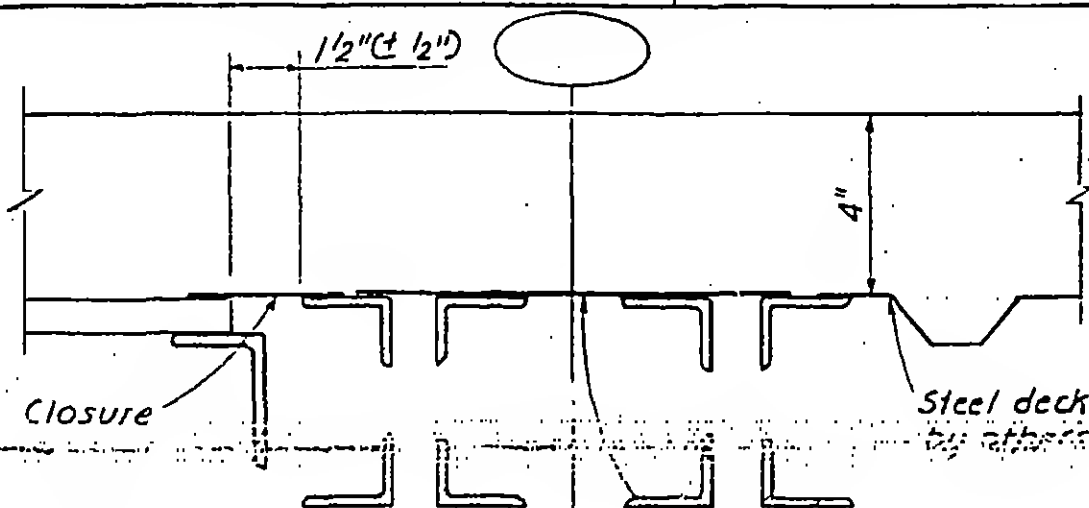
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PROJECT THE WORLD TRADE CENTER TITLE TYPICAL SECTIONS - 4" SLAB ON STEEL DECK DATE 3-1-68

REVISIONS

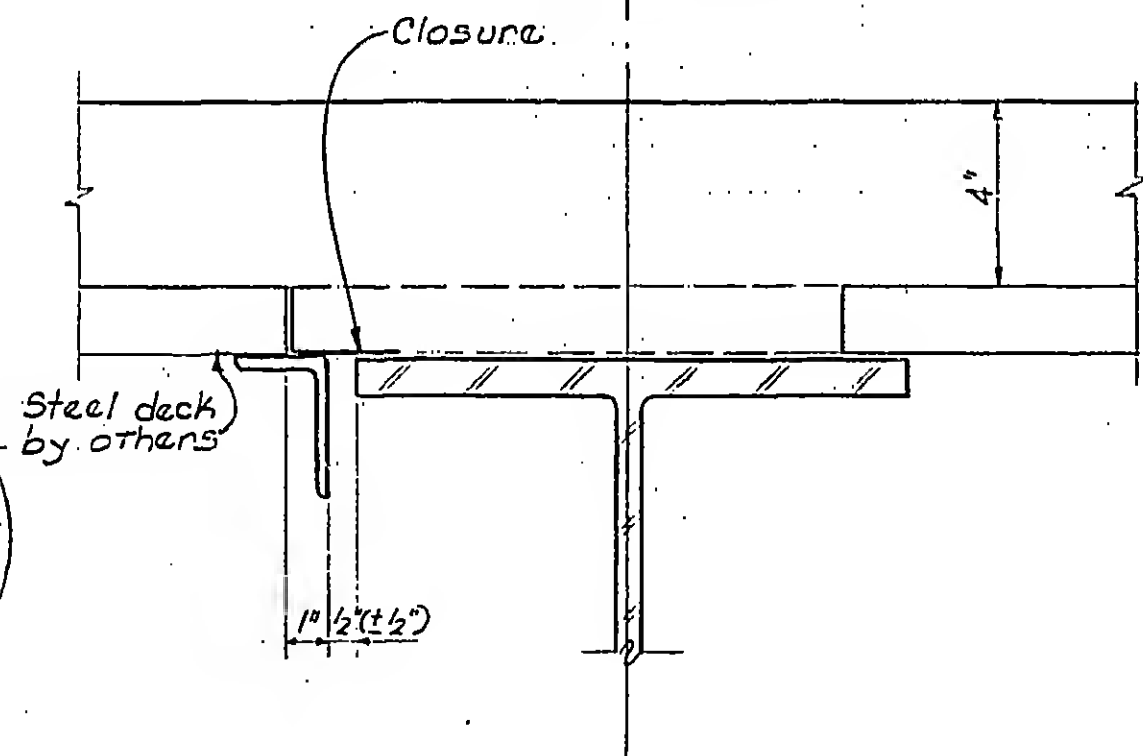
5/31/68



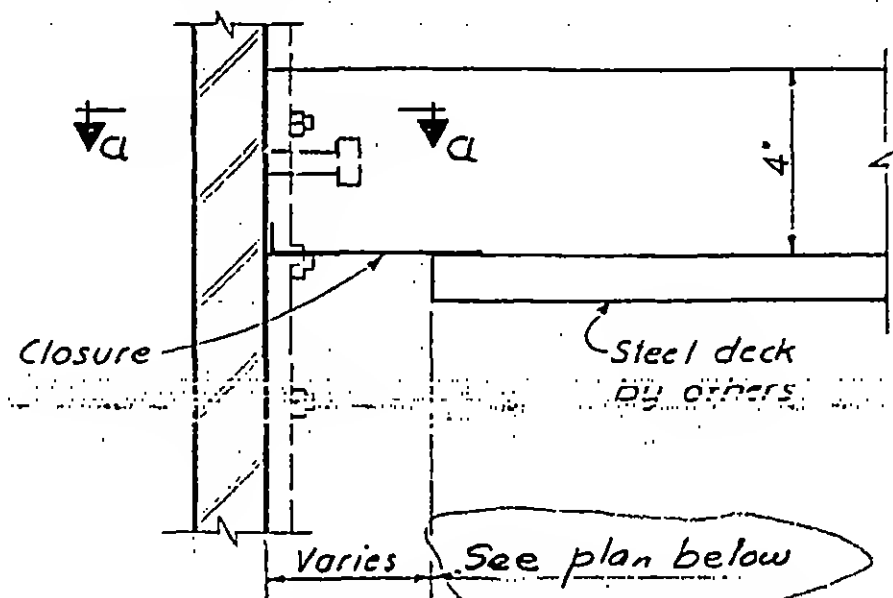
Note:  
Reinf. not shown.

Closure by others

Section D-D

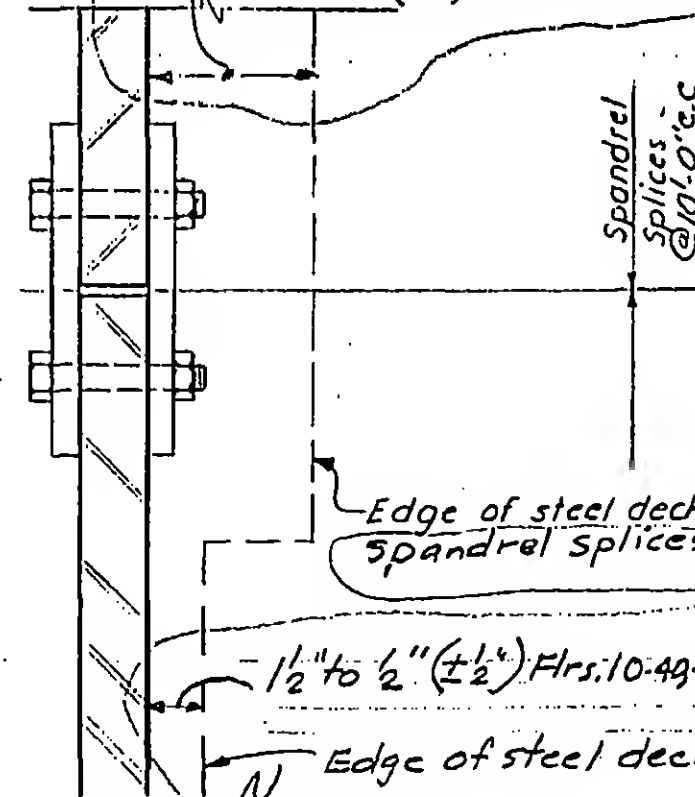


Section F-F



Section E-E

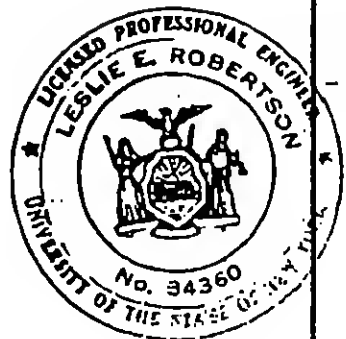
(2 1/2" to 3 1/2" (± 1/2")) Flrs. 10-40, 44-74  
(2 1/2" to 2" (± 1/2")) Flrs. 78-106



Plan Section a-a

Note:  
Reinforcing not shown.

8-AB2-2.3



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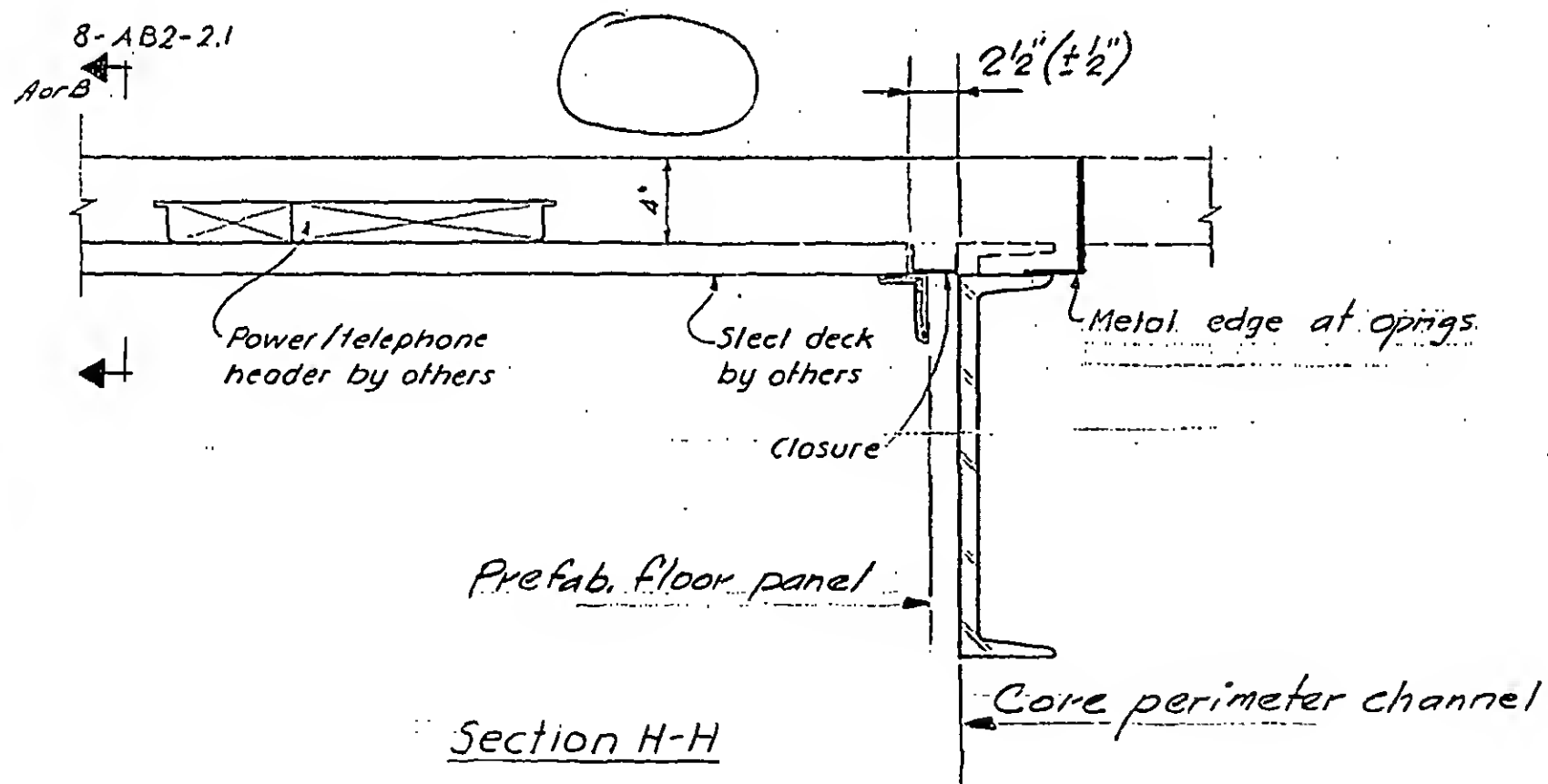
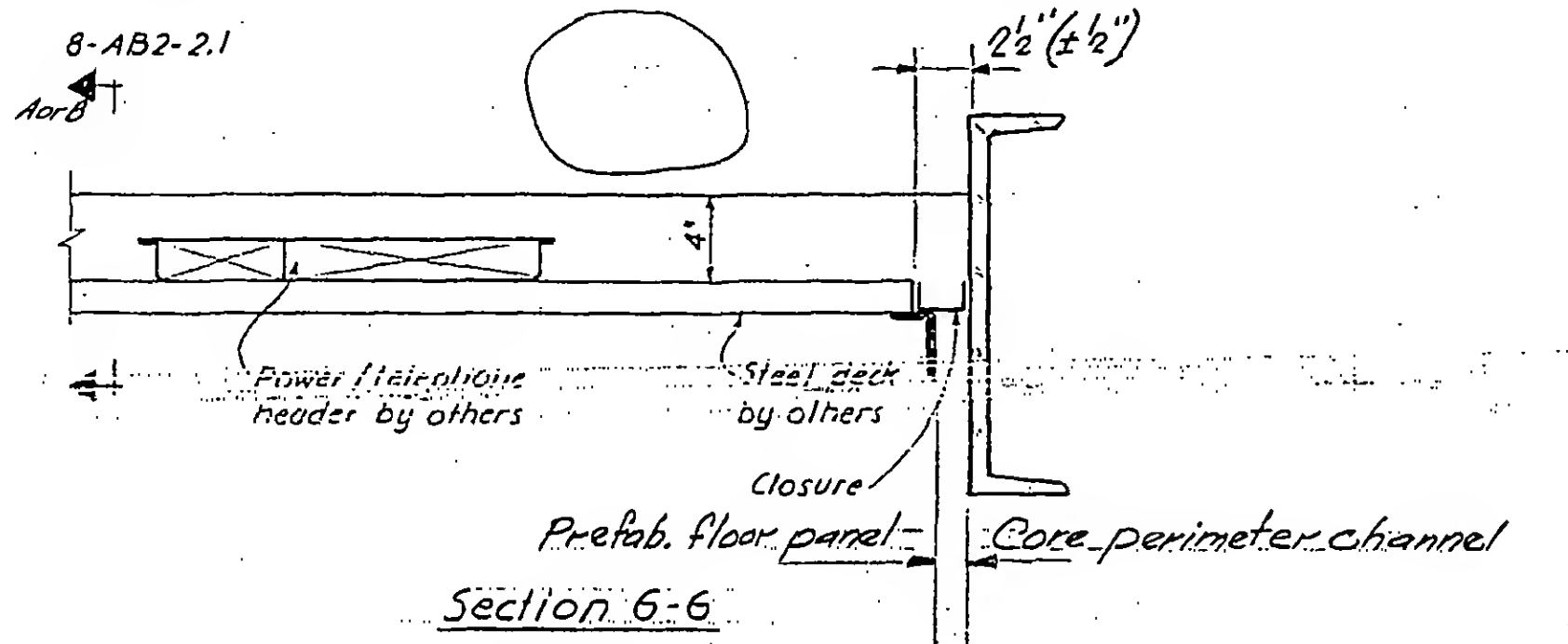
TITLE TYPICAL SECTIONS - 4" SLAB ON STEEL DECK

DATE 3-1-68

## REVISIONS

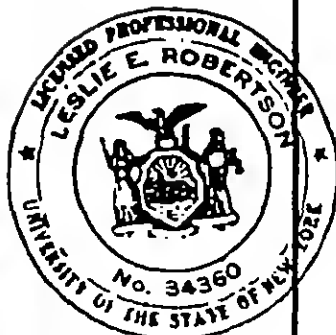
5/31/68

3-12-69



Note:

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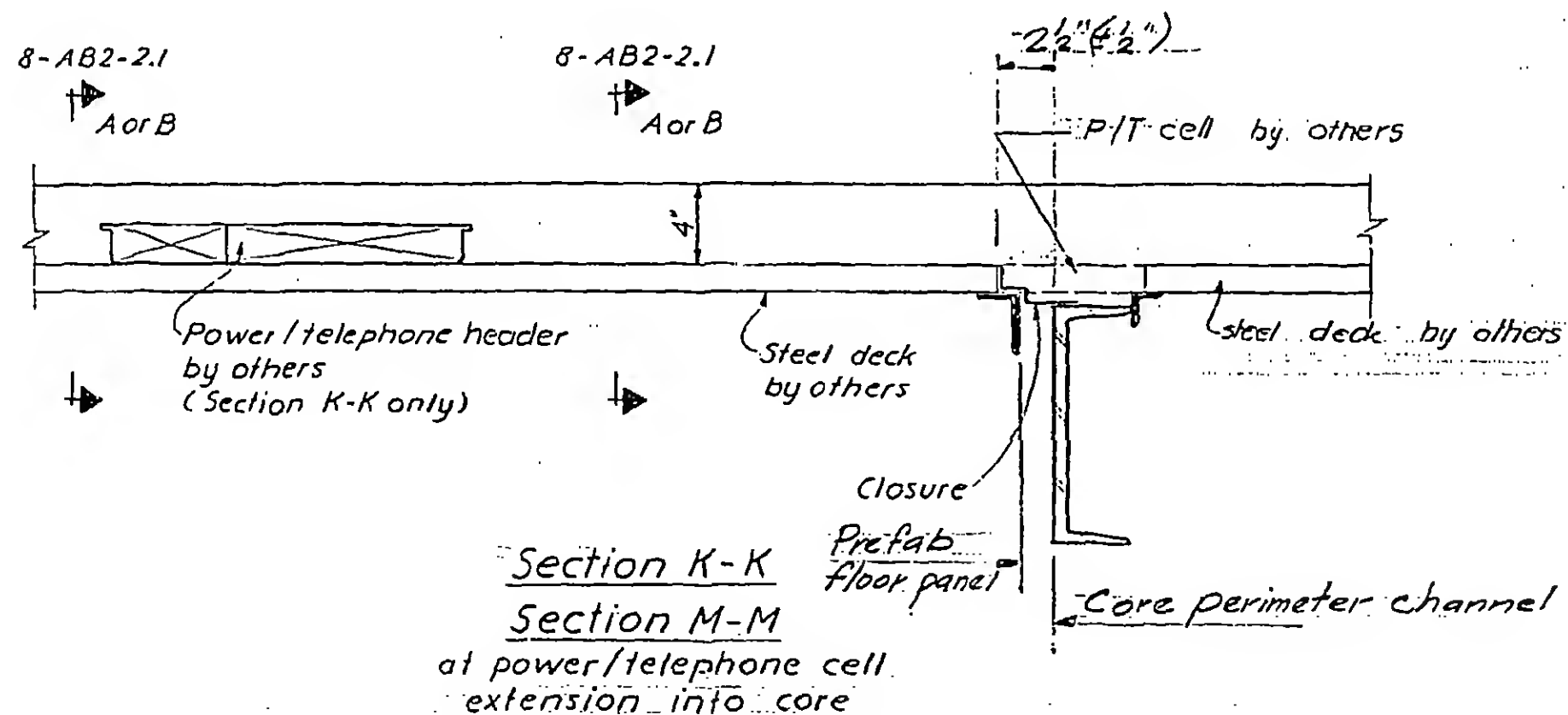
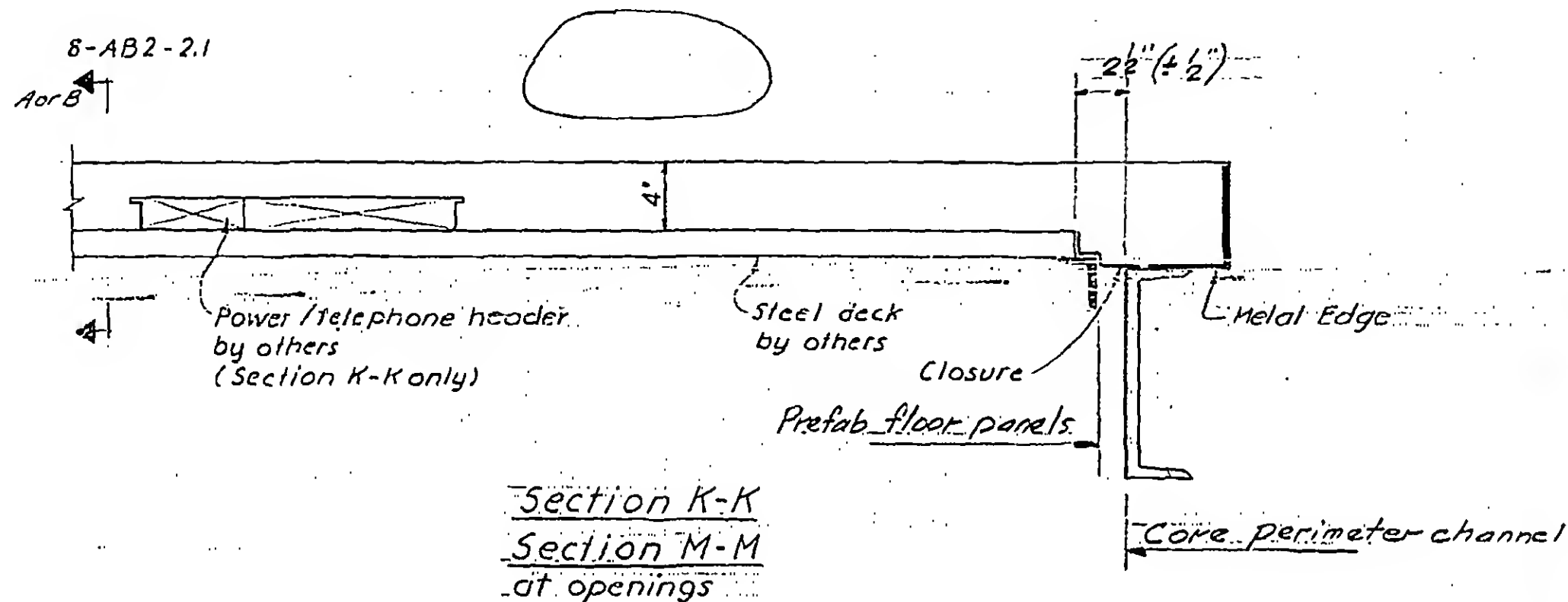


8-AB2-2.4

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Note:  
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8-AB2-2.5

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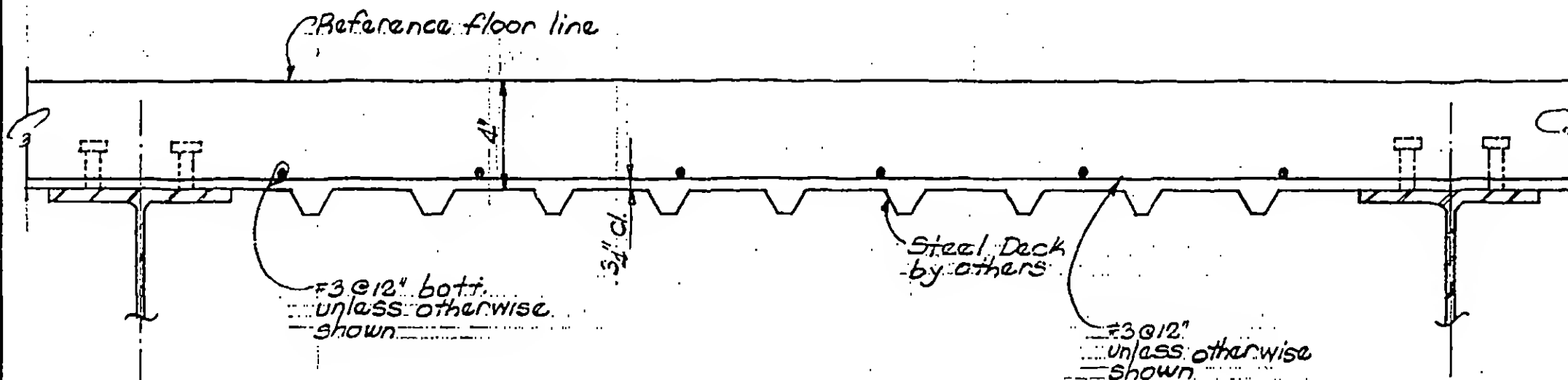
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TITLE TYPICAL SECTIONS - 4" SLAB ON STEEL DECK

DATE 3-1-68

REVISIONS



Section N-N



8-AB2-2.6

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PROJECT

THE WORLD TRADE CENTER

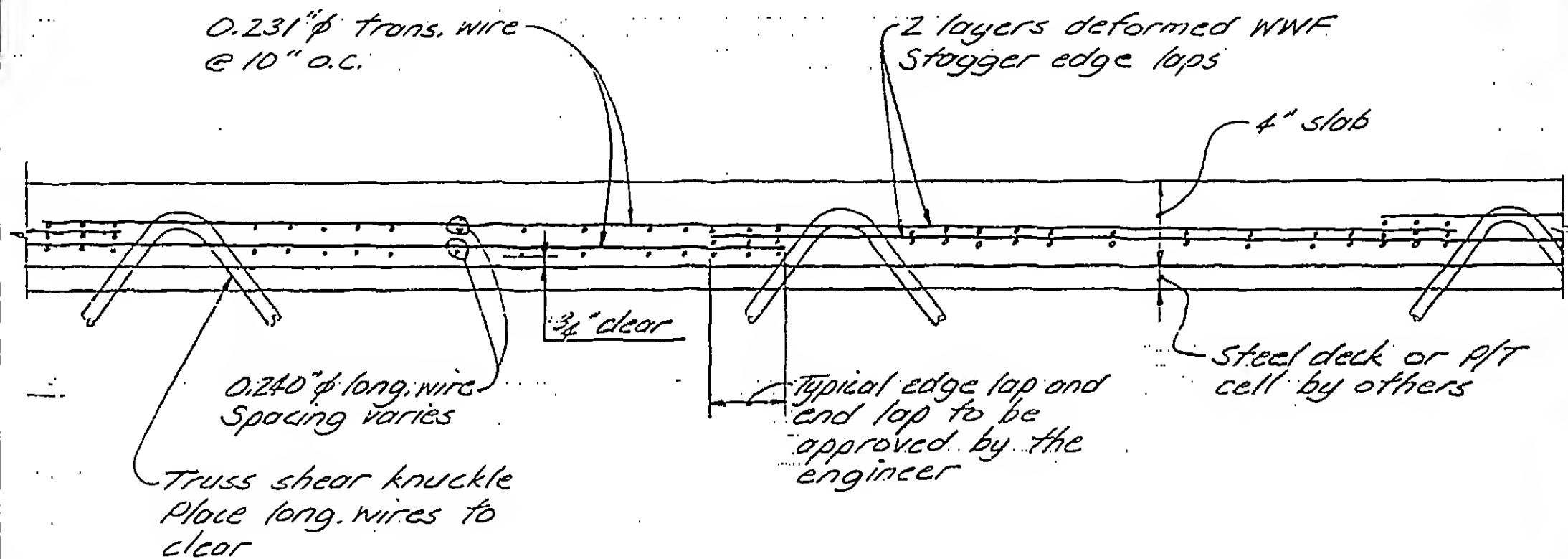
TITLE

TYPICAL SECTIONS - 4" SLAB ON STEEL DECK

DATE

8-27-69

REVISIONS



Section Q-Q  
Typical Section - Floor



DESIGNED

DRAWN

J.A.

CHECKED

WAB

8-AB2-2.7



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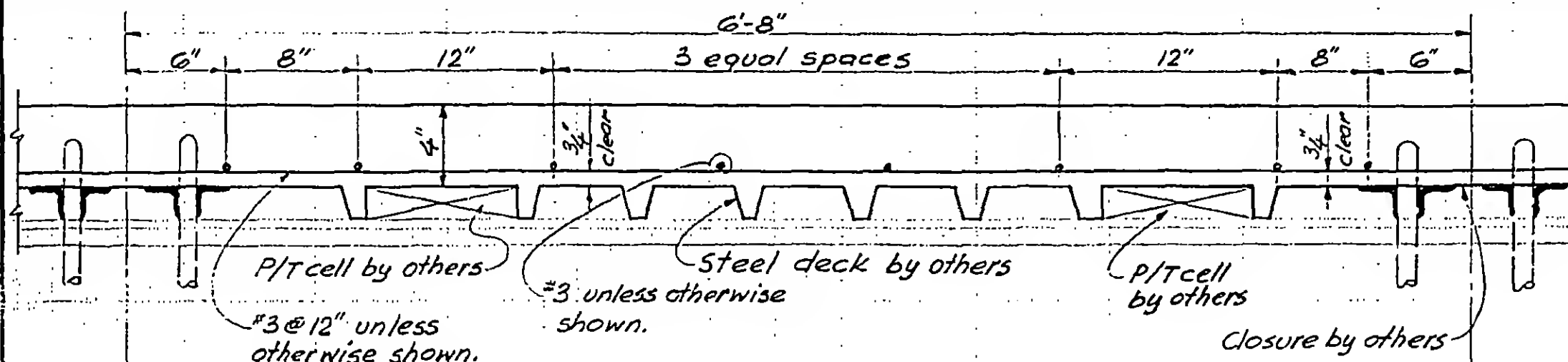
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TITLE TYPICAL SECTIONS - 4" SLAB ON STEEL DECK

DATE 10-24-69

REVISIONS

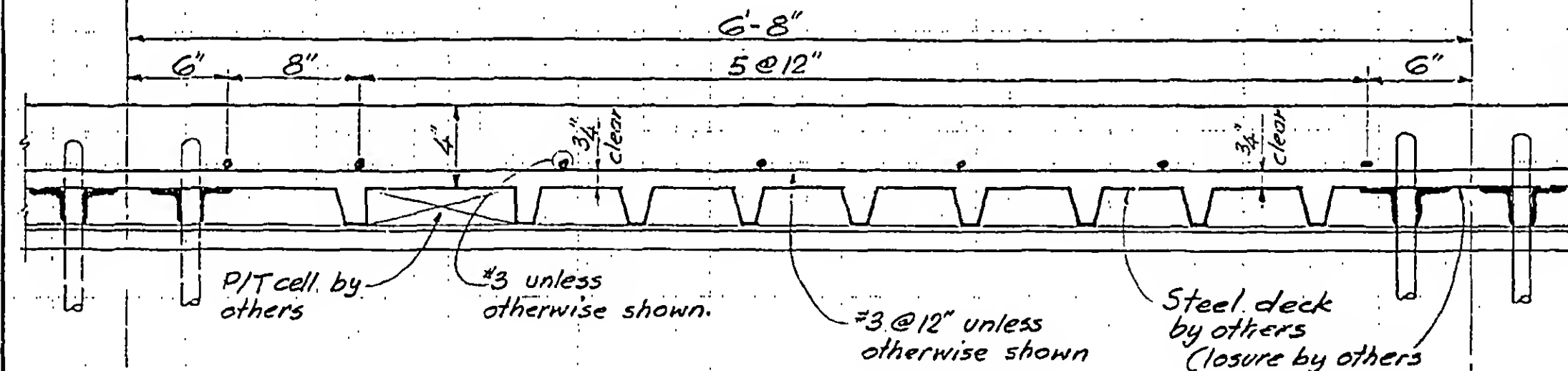


Section R-R

Bay on  $\phi$  of building

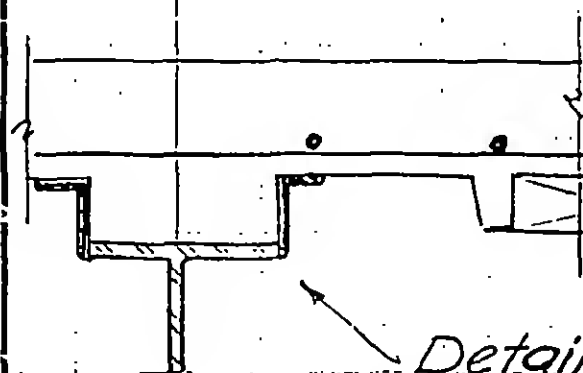
$\phi$  truss (as shown or  $\phi$  beam)

$\phi$  truss (as shown) or  $\phi$  beam



Section S-S

Typical Bay



B-AB2-2.8

## Structural & Civil Engineers

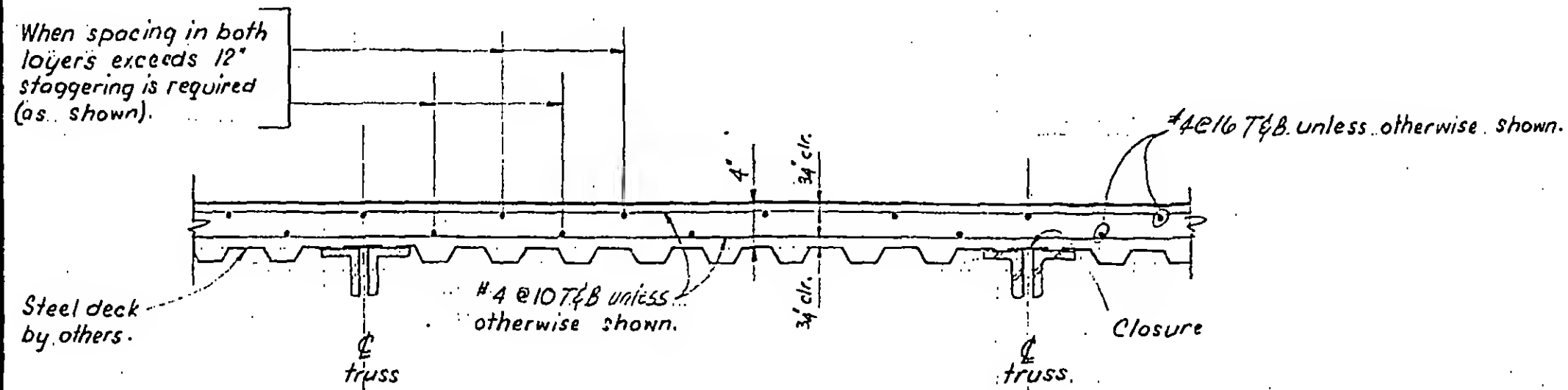
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TITLE TYPICAL SECTIONS - 4" SLAB ON STEEL DECK.

DATE 3-19-70

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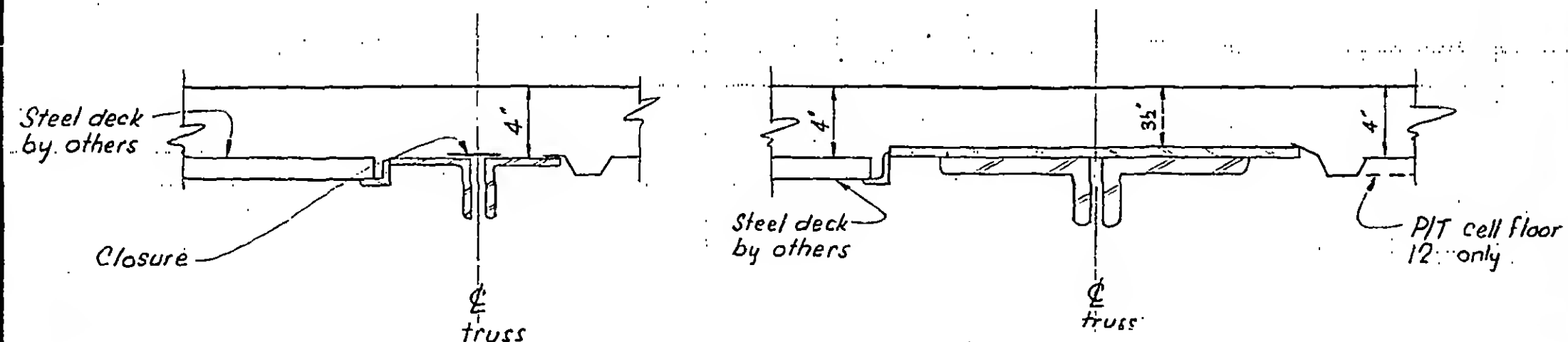
When spacing in both  
layers exceeds 12"  
staggering is required  
(as shown).



SECTION T-T

Typical Bay

- Notes: 1. For sequence of bar placement see plans.  
2. PIT cells (by others) may occur in deck construction floor 12 only. See plans.



SECTION U- U

Note: Reinf. not shown

SECTION 41-41

Note: Reinf. not shown.



DESIGNED

T. O'Neill

**DRAWN**

T. Terrelonge

REVIEWED

8-AB2-2.9

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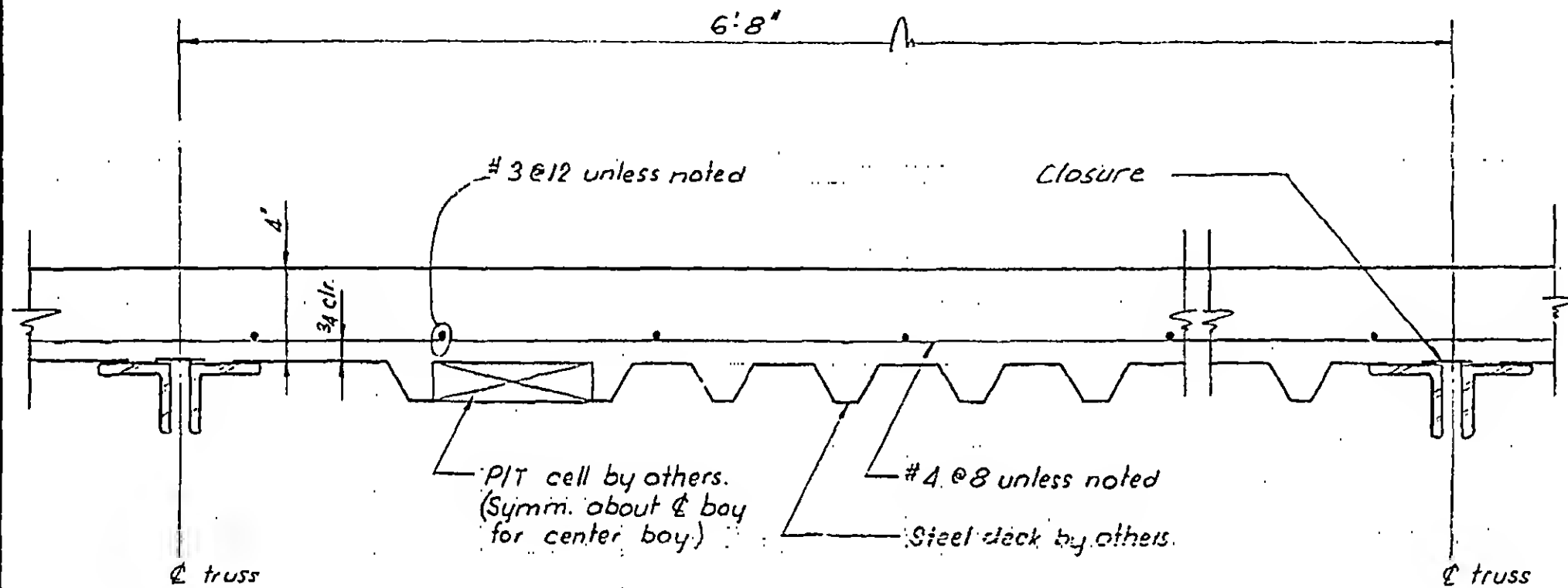
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SECTION V-V  
TYPICAL BAY



DESIGNED

T. O'Neill

DRAWN

T. Terrelonge

REVIEWED

8-AB2-2.10

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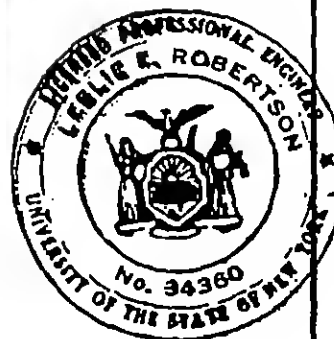
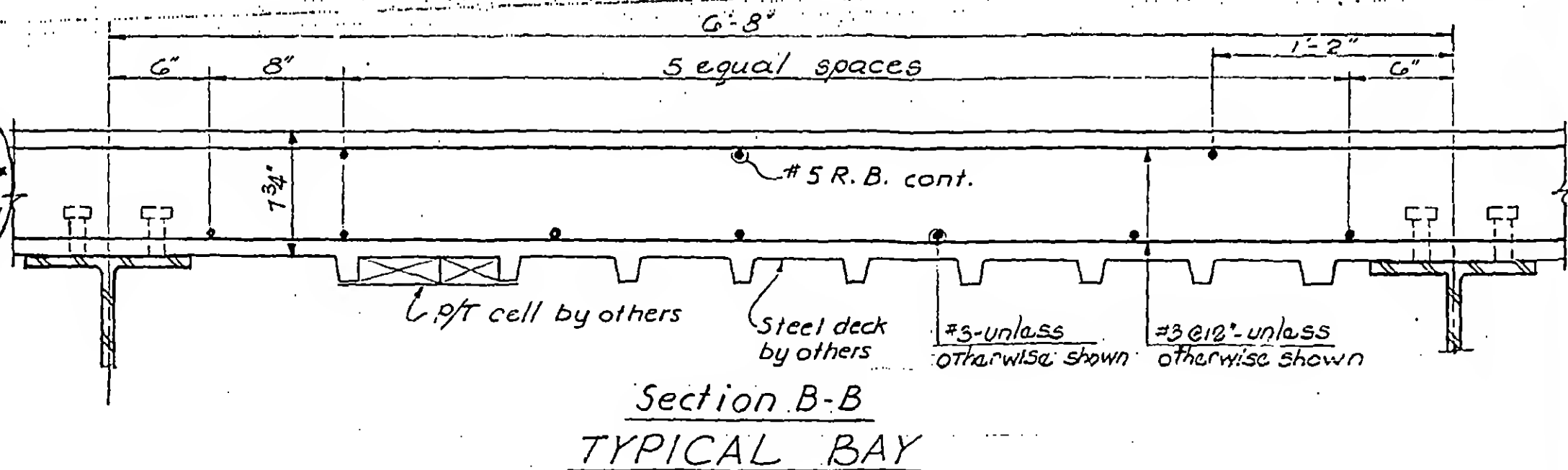
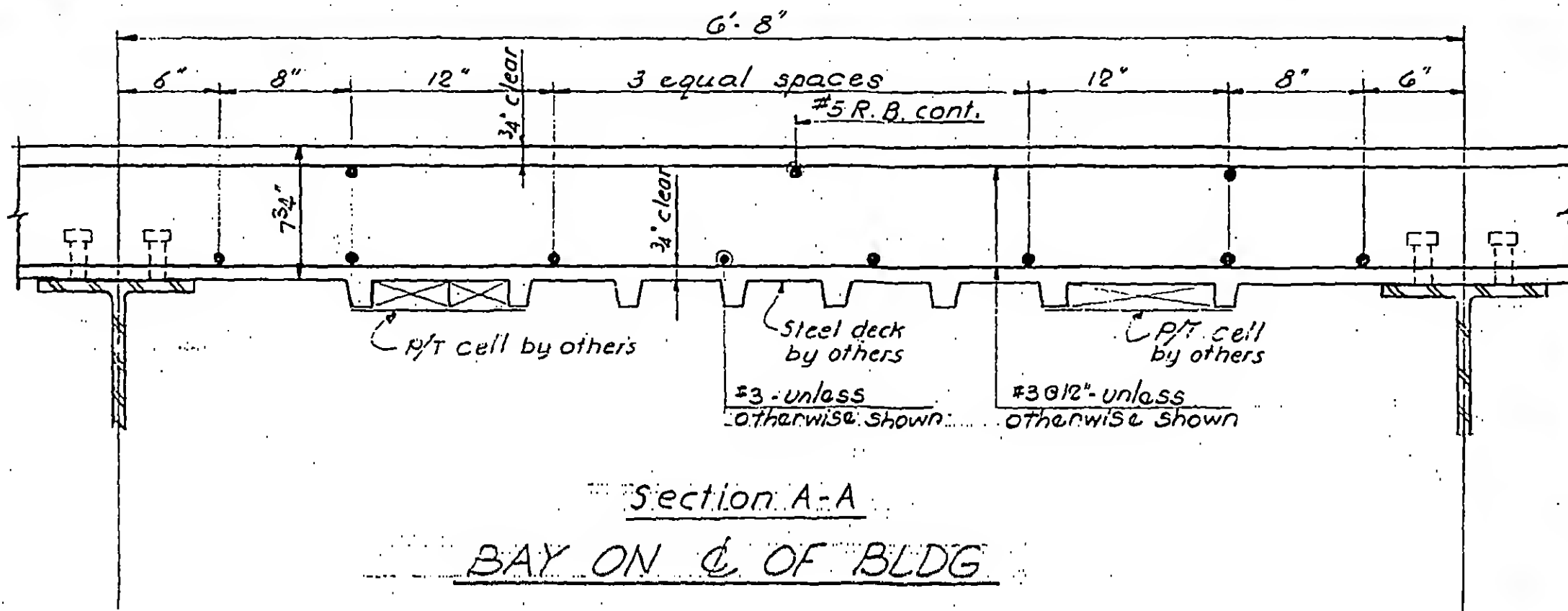
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TITLE TYPICAL SECTION - SLAB 5" OR MORE ON STEEL DECK

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J.L.M.

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8-AB2-3.1

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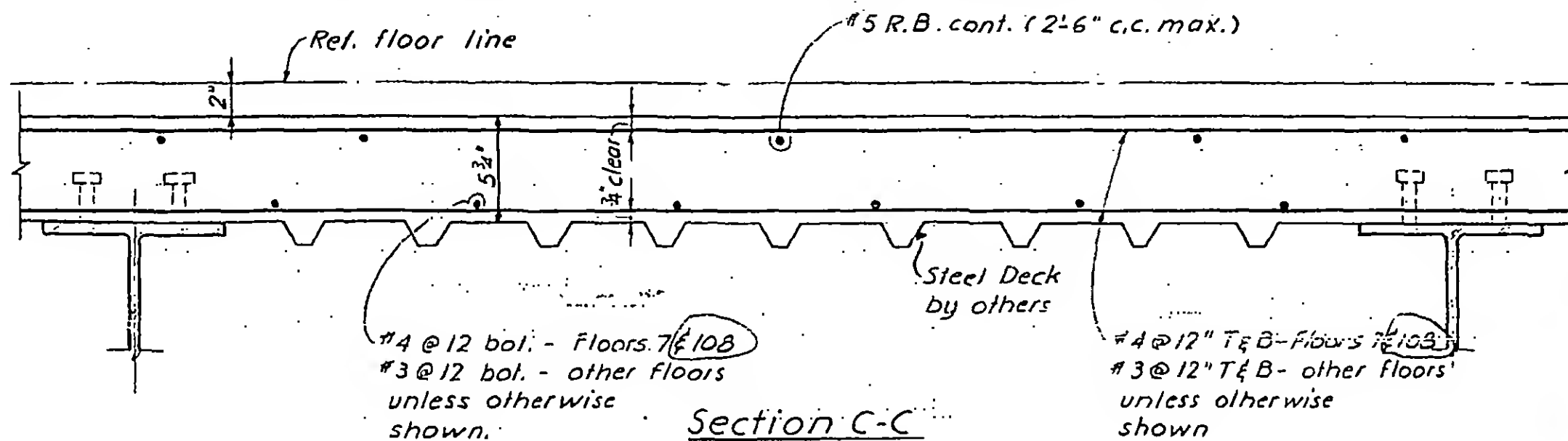
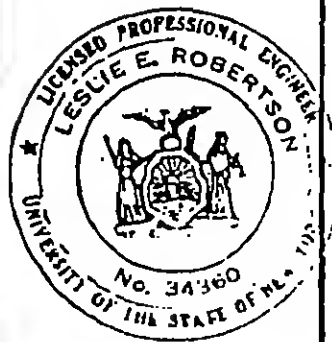
PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL SECTIONS - SLAB 5" OR MORE ON STEEL DECK

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TYPICAL BAY

8-AB2-3.2

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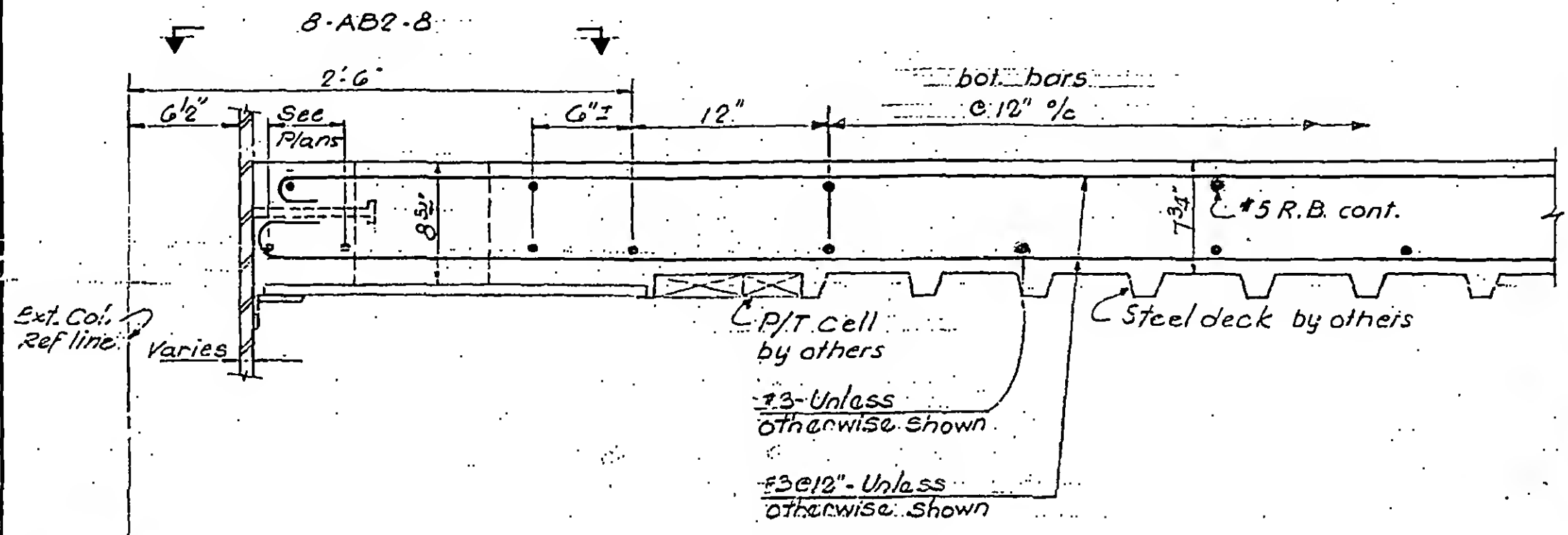
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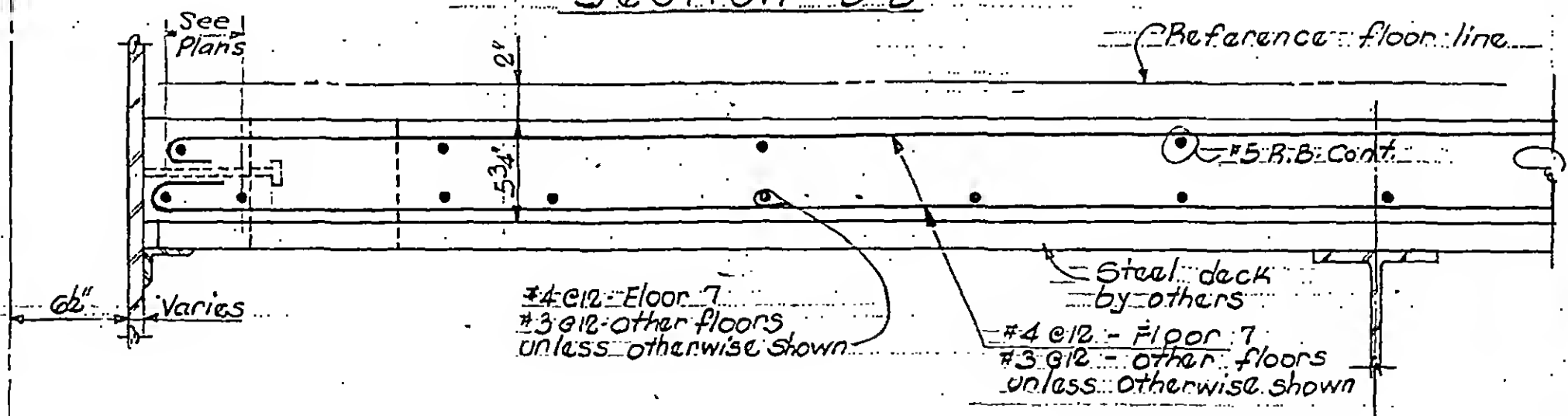
TITLE TYPICAL SECTION-SLAB 5' OR MORE ON STEEL DECK

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Section D-D



Section E-E

END BAY



8-AB2-3.3

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TITLE TYPICAL SECTIONS - 5" OR MORE SLAB ON STEEL DECK

DATE 3-1-68

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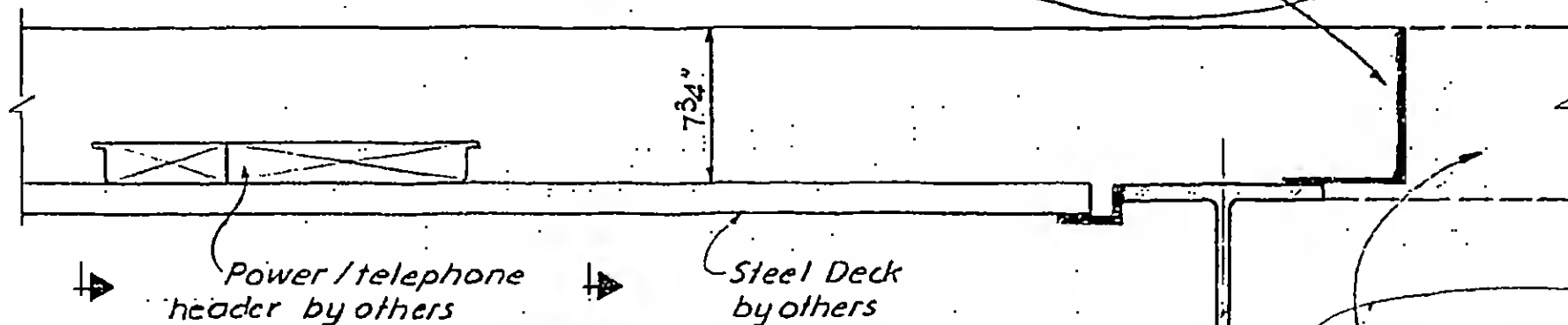
8-AB2-3.1

↑ A or B

8-AB2-3.1

↑ A or B

metal edge at opngs



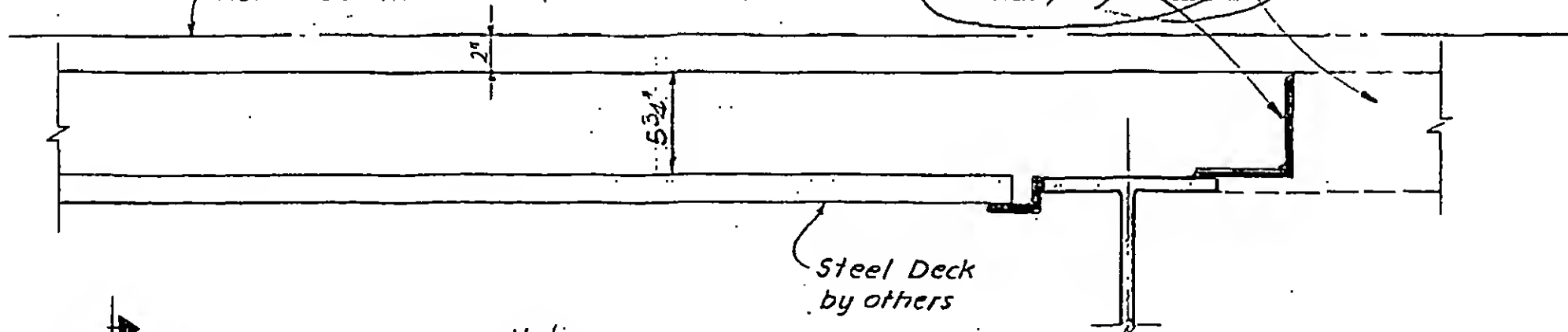
Section F-F

8-AB2-3.2

↑ C

Ref. floor line

metal edge at opngs



Section 6-6



8-AB2-3.4

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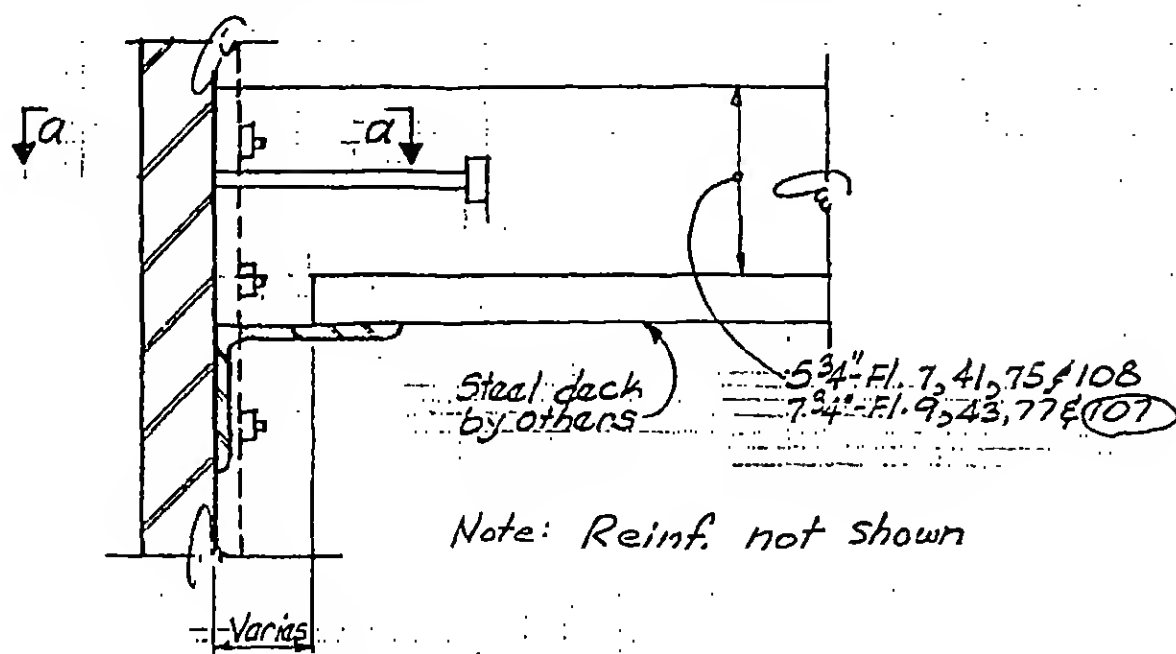
PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL SECTIONS - SLAB 5' OR MORE ON STEEL DECK

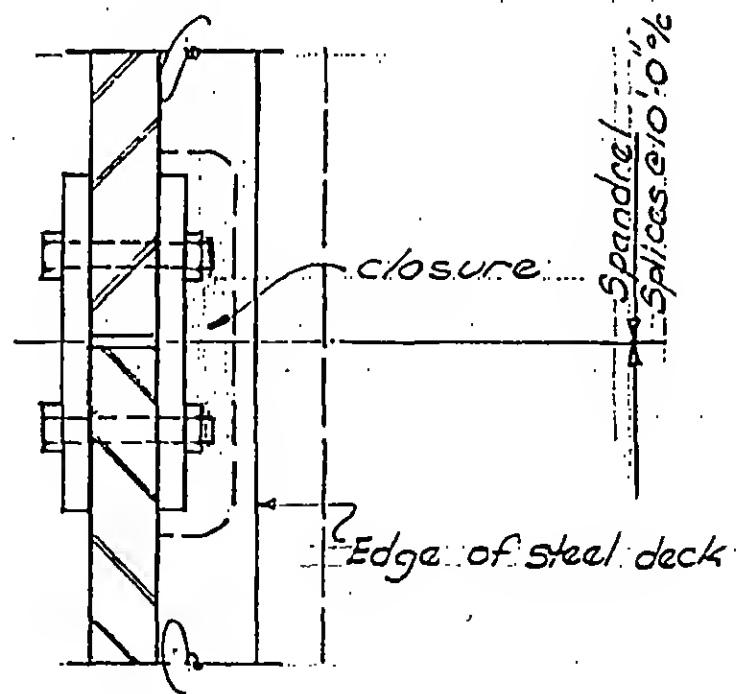
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12-1-70



Section H-H



Plan Section a-a





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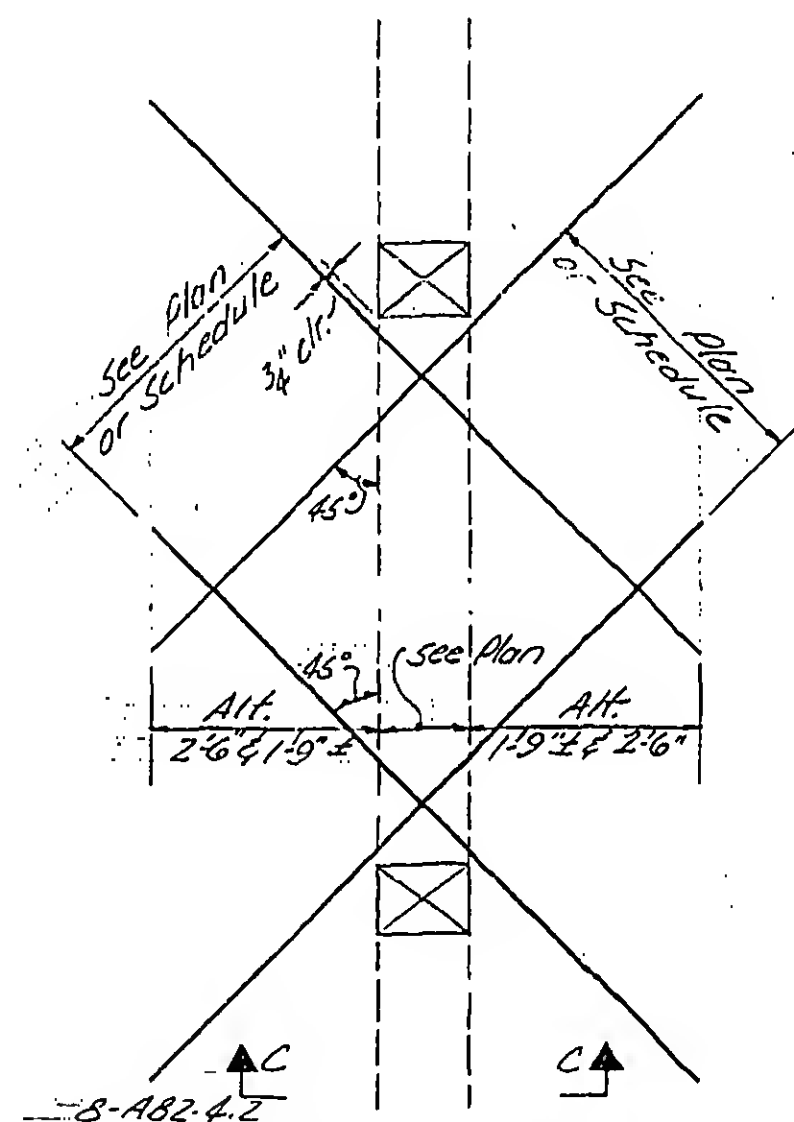
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL DETAILS OF 2" HEADER IN 4" SLAB

DATE 3-1-68

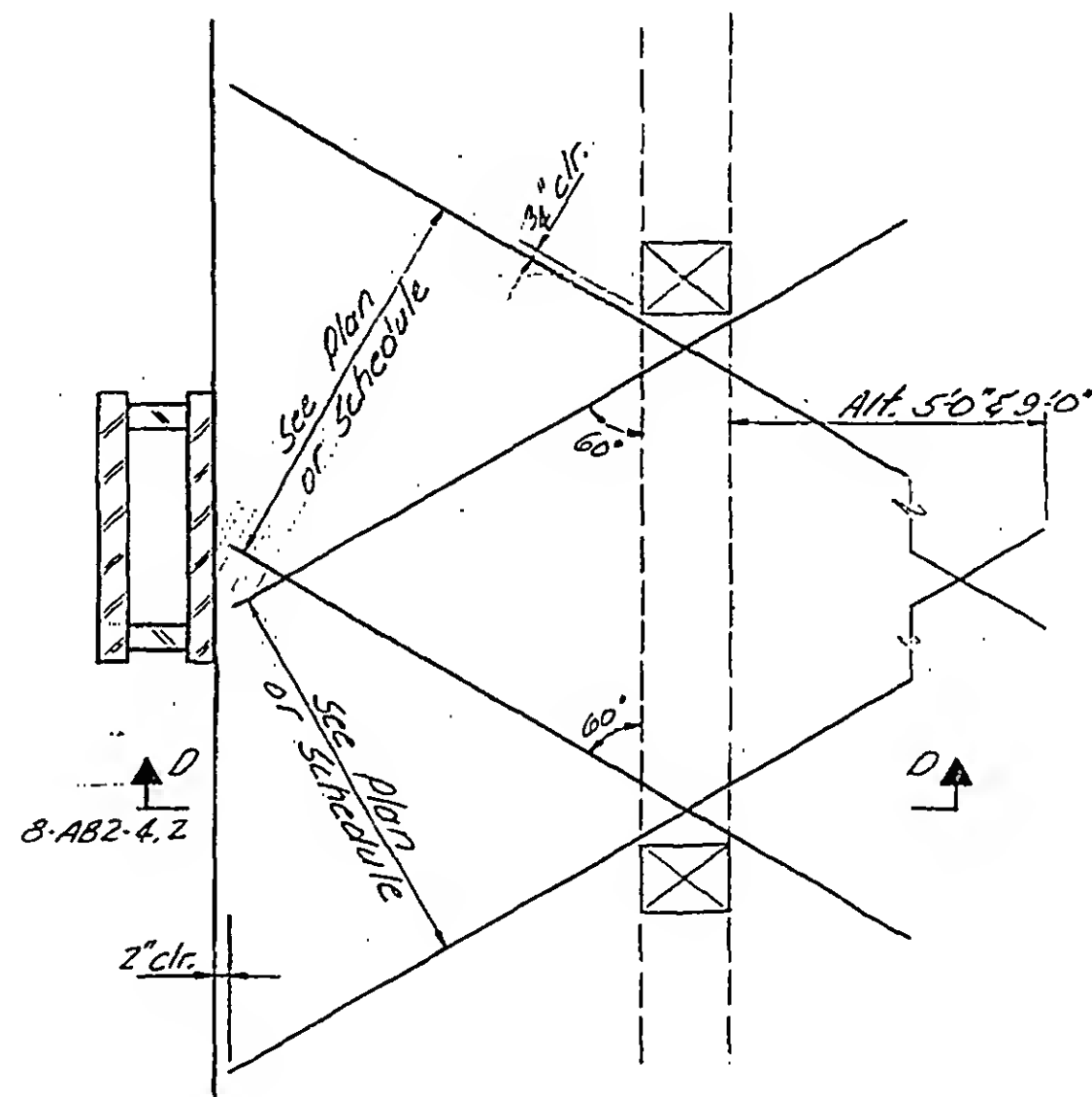
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3-12-69

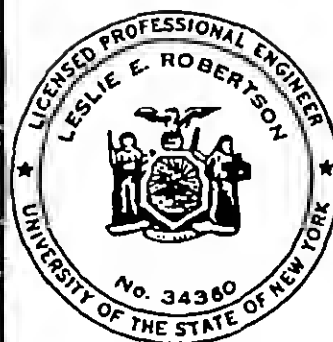
Detail Plan A  
Typical for bars at 45° to header

## NOTE:

Any bars cut short because of 3" headers or other obstructions shall be hooked.



Detail Plan B  
Typical for bars at 60° to header



DESIGNED

DRAWN

J. Adams

REVIEWED

8-AB2-4.1

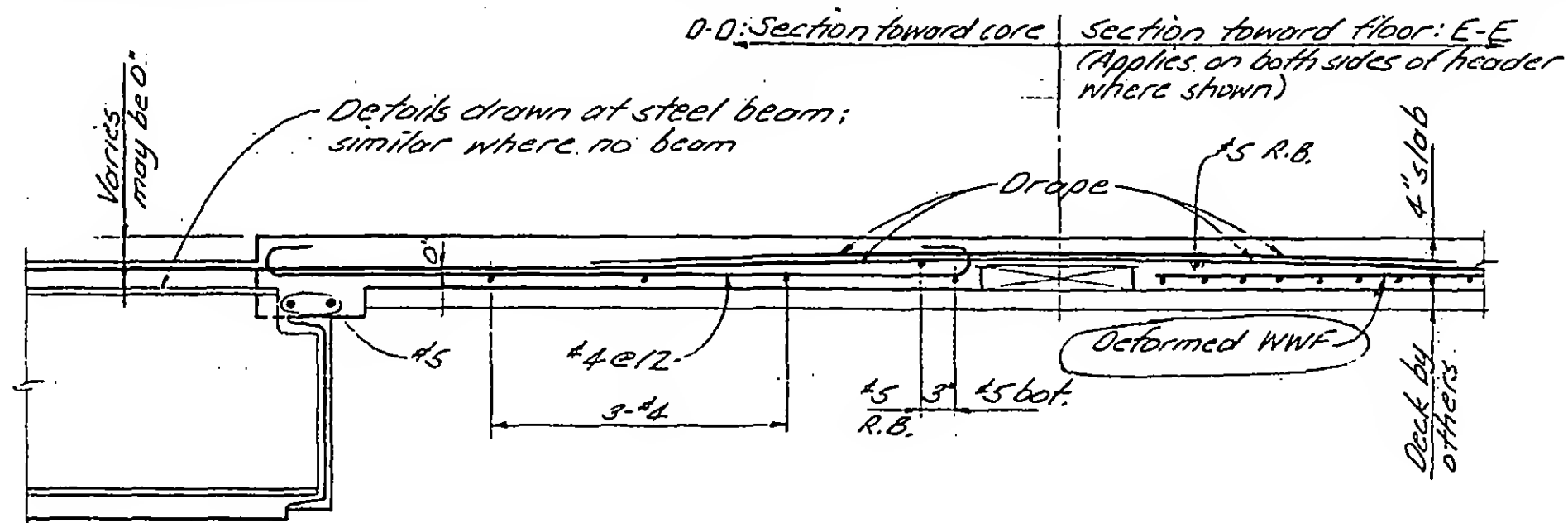
PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL DETAILS OF 2" HEADER IN 4" SLAB

DATE 3-12-69

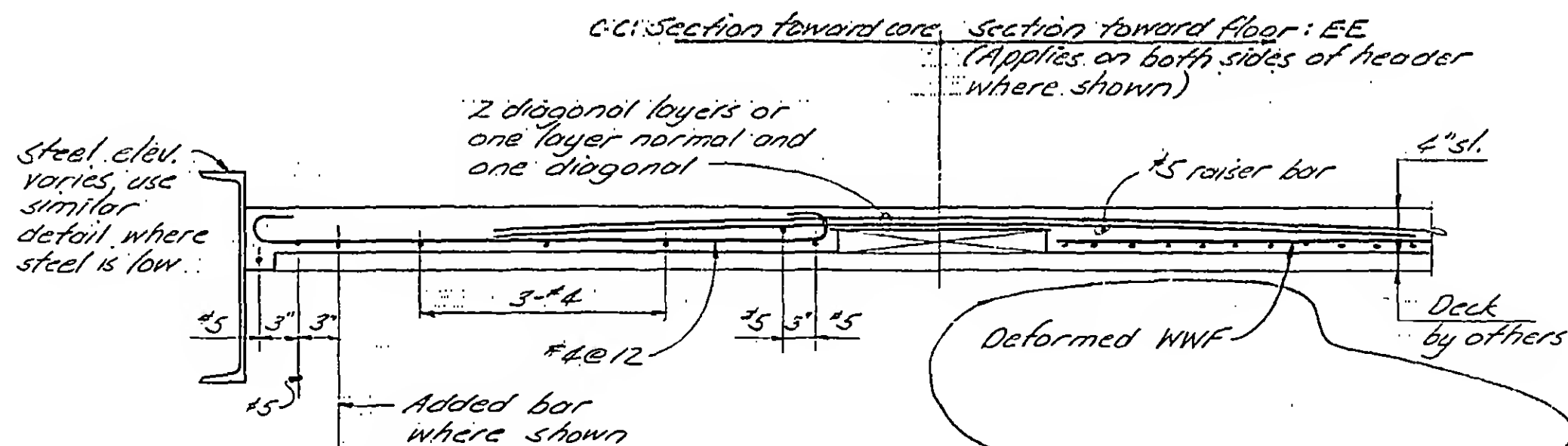
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Section D-D

Section E-E



Section C-C

Section E-E

## NOTE

For additional reinf. or other modifications see Plans; see Note 5 on 8-AB1-2.3.



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J. Adams

REVIEWED

C. B. B.

8-AB2-4.2

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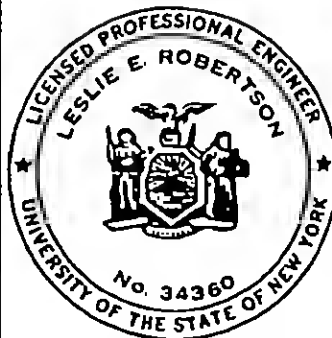
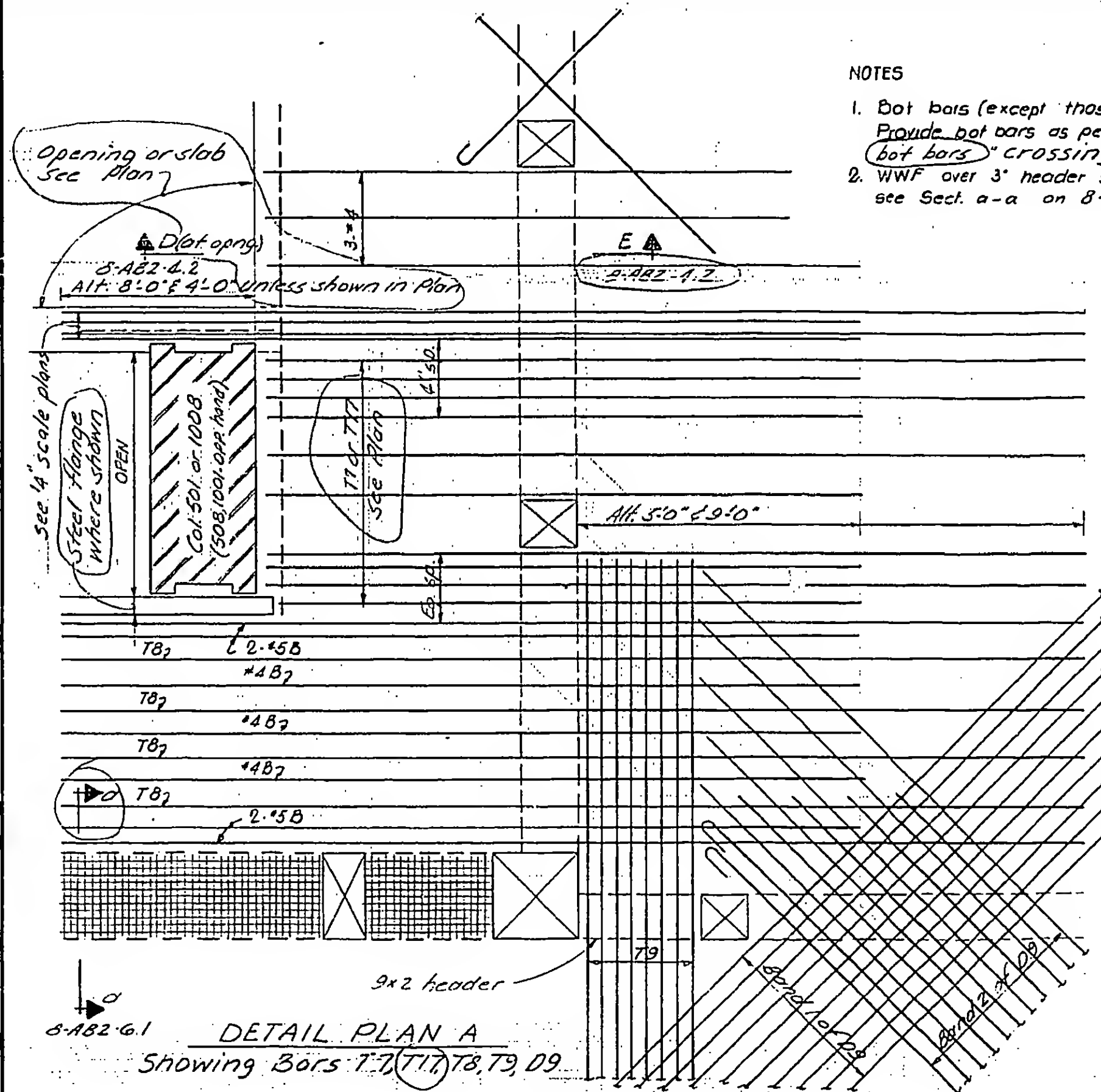
|       |                                |
|-------|--------------------------------|
| TITLE | DETAILS OF BARS ACROSS HEADERS |
|-------|--------------------------------|

DATE 3-1-68

8-27-69

1. Dot bars (except those marked "B") not shown.  
Provide dot bars as per Sections. Drape  
dot bars "crossing headers".

2. WWF over 3" header shown thus ##. For width  
see Sect. a-a on 8-AB2-G.1.



DESIGNED

**CHAW**

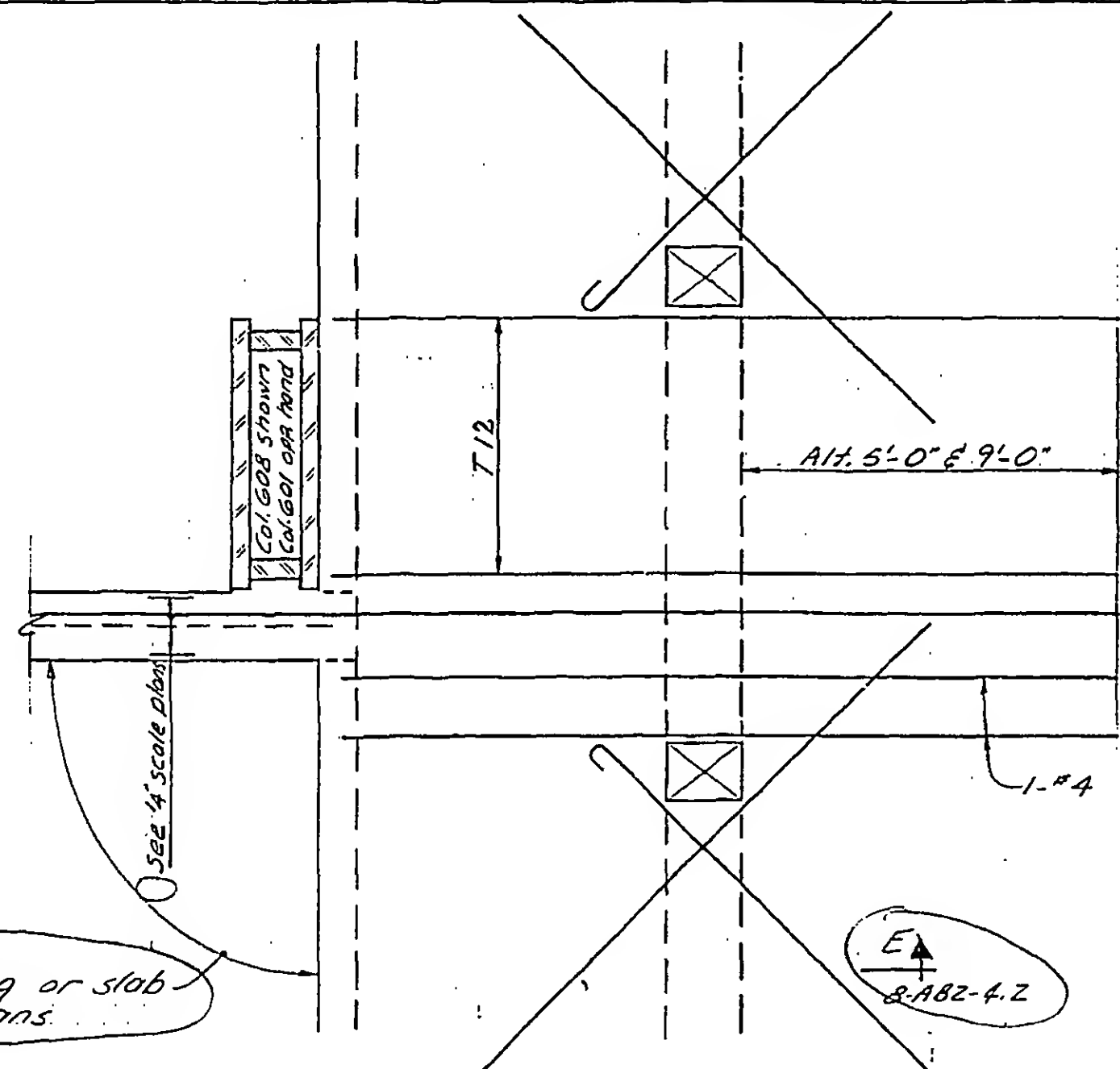
G.T. Hellebranth

## REVIEWER

8-ABZ-5.1

REVISIONS

*8-27-69*

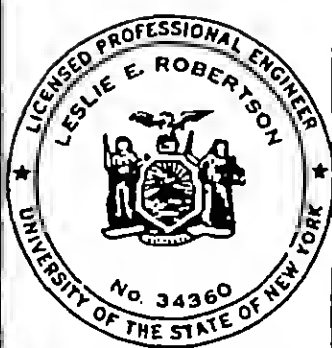


*For notes see 8-AB2-5.1*

*Opening or slab  
See plans*

*EA  
8-AB2-4.2*

DETAIL PLAN B  
Showing Bars T12



DESIGNED

DRAWN

*A.L.F.*

REVIEWED

*WAP*

*8-AB2-5.2*

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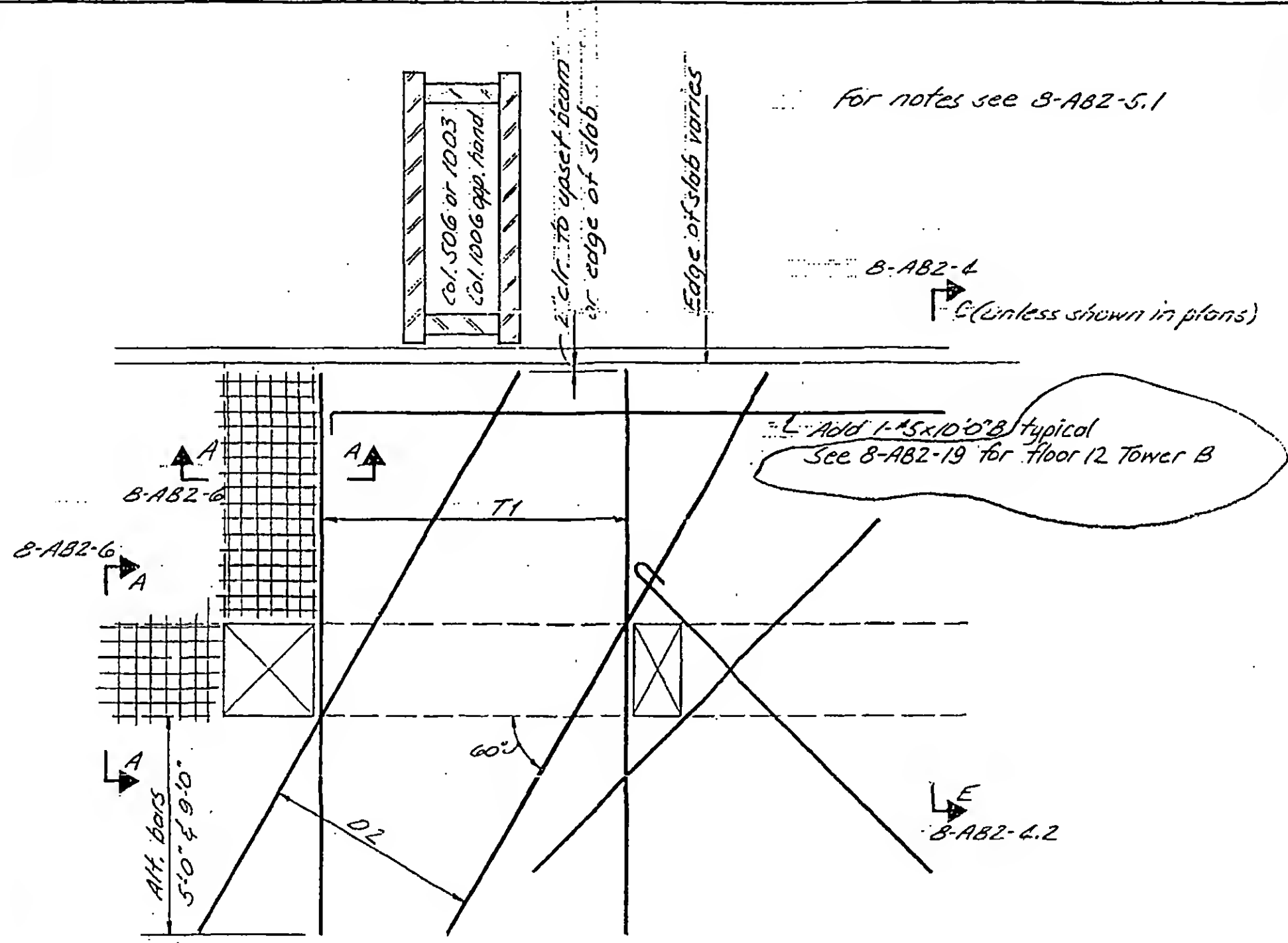
TITLE DETAILS OF BARS ACROSS HEADERS

DATE 3-12-69

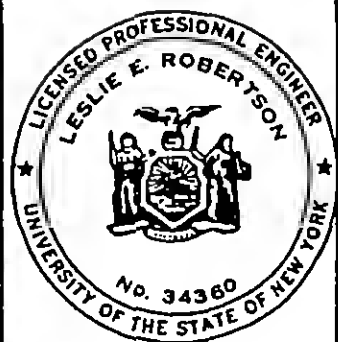
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DETAIL PLAN C  
Showing bars T1, D2



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W. AB

8-AB2-5.3

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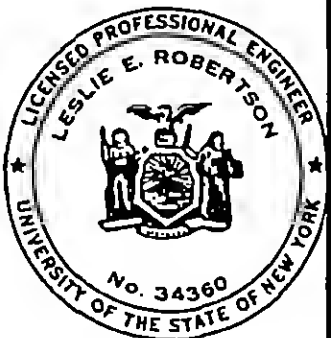
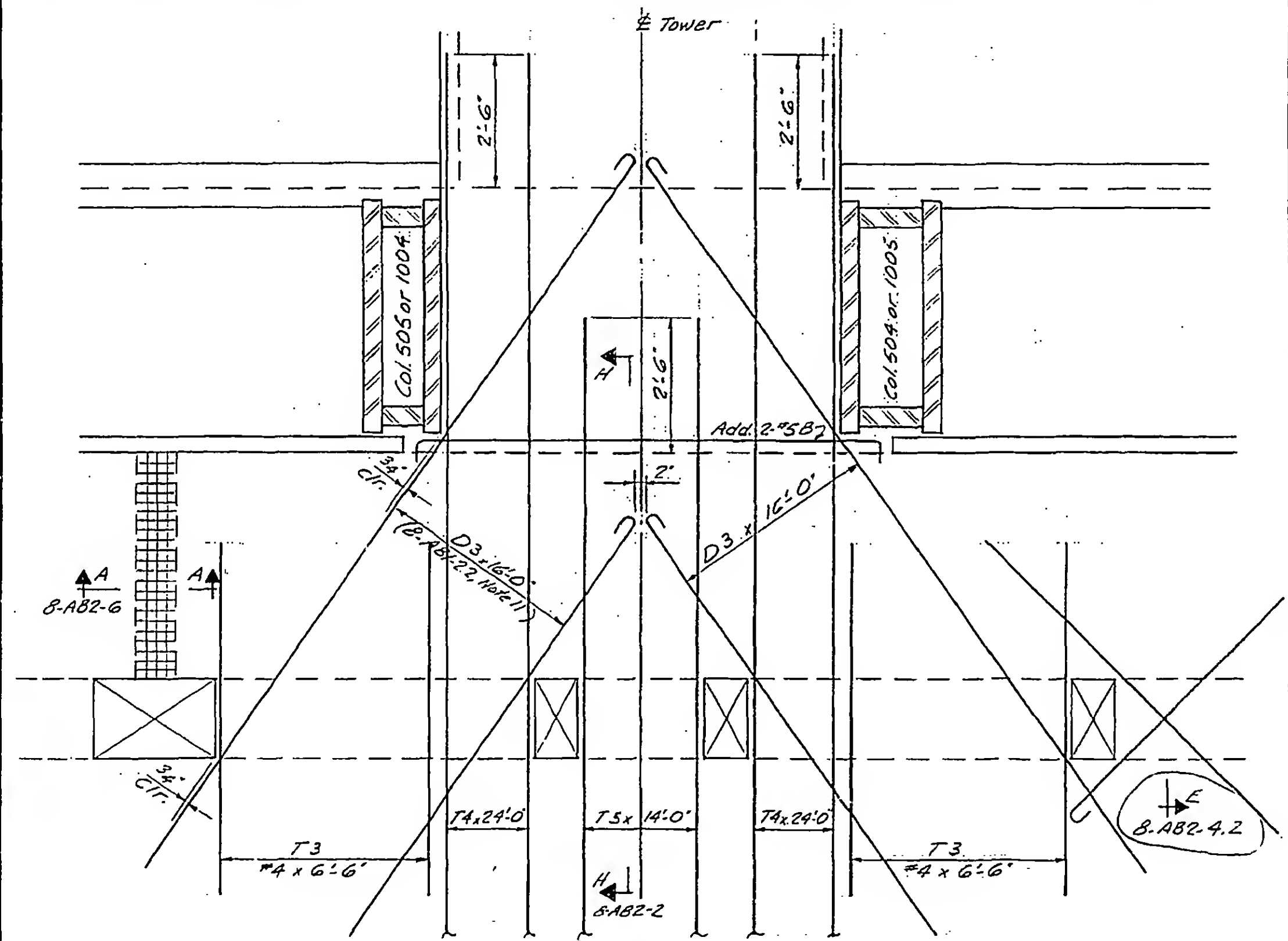
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TITLE DETAILS OF BARS ACROSS HEADERS

DATE 3-12-69

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DETAIL PLAN D

Showing Bars T3, T4, T5, D3

For notes see 8-AB2-5.1

8-AB2-5.4

DESIGNED

DRAWN

A.L.F.

REVIEWED

WAB

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TITLE DETAIL OF BARS ACROSS HEADERS

DATE 3-12-69

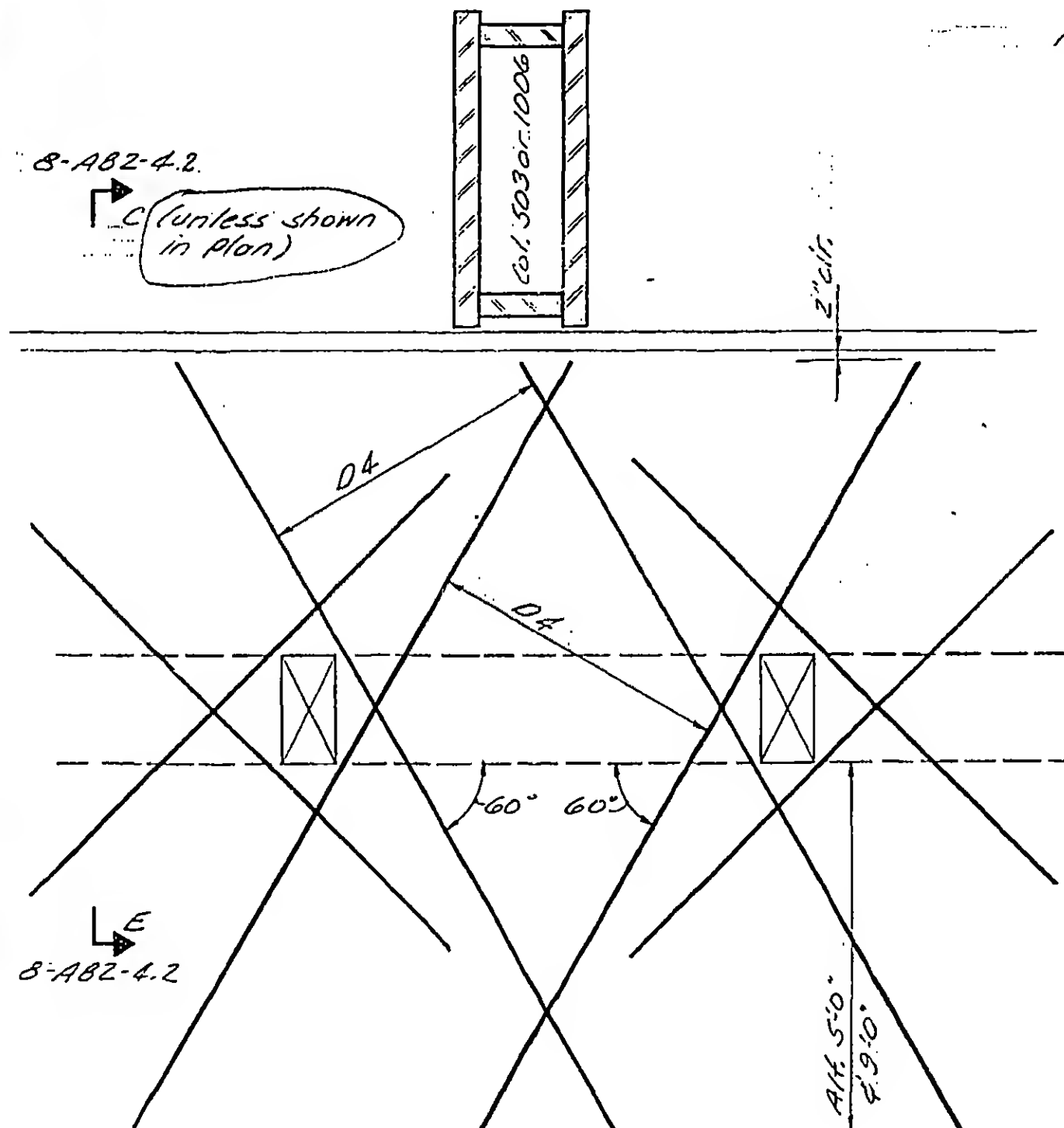
REVISIONS

8-27-69

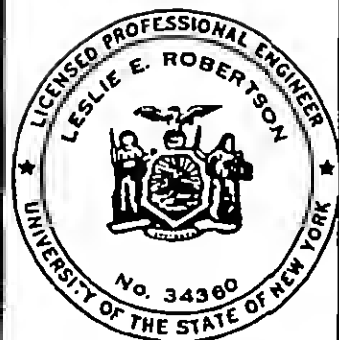
8-AB2-4.2

C (unless shown in Plan)

For notes see 8-AB2-5.1



DETAIL PLAN E  
Showing bars D4



DESIGNED

DRAWN

J. Adams

REVIEWED

Chap

8-AB2-5.5

REVISIONS

8-27-69

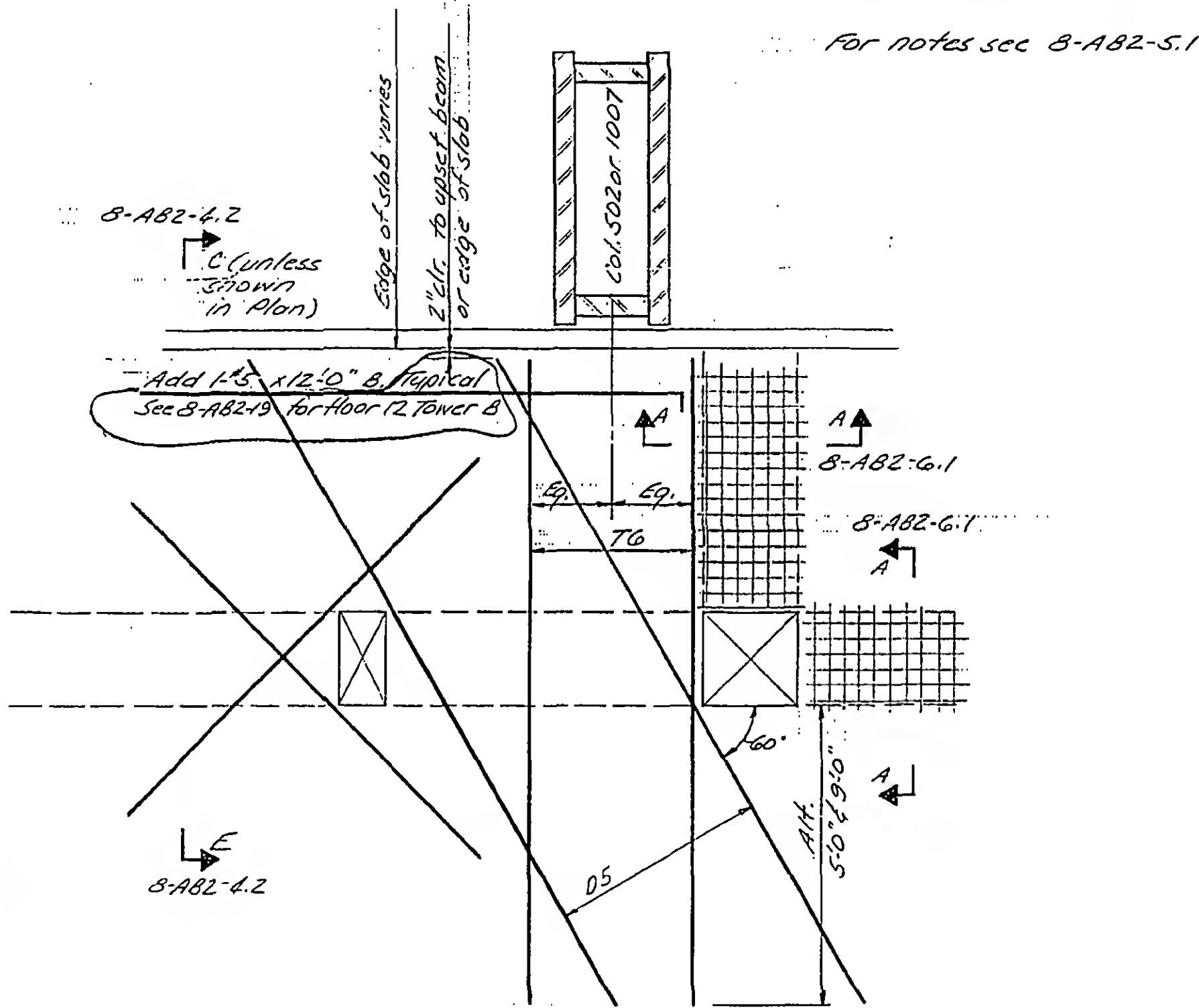
3-19-70



DESIGNED

DRAWN J. Adams

REVIEWED W. AD



DETAIL PLAN F  
Showing bars TG, 05



SKILLING - HELLE - CHRISTIANSEN - ROBERTSON

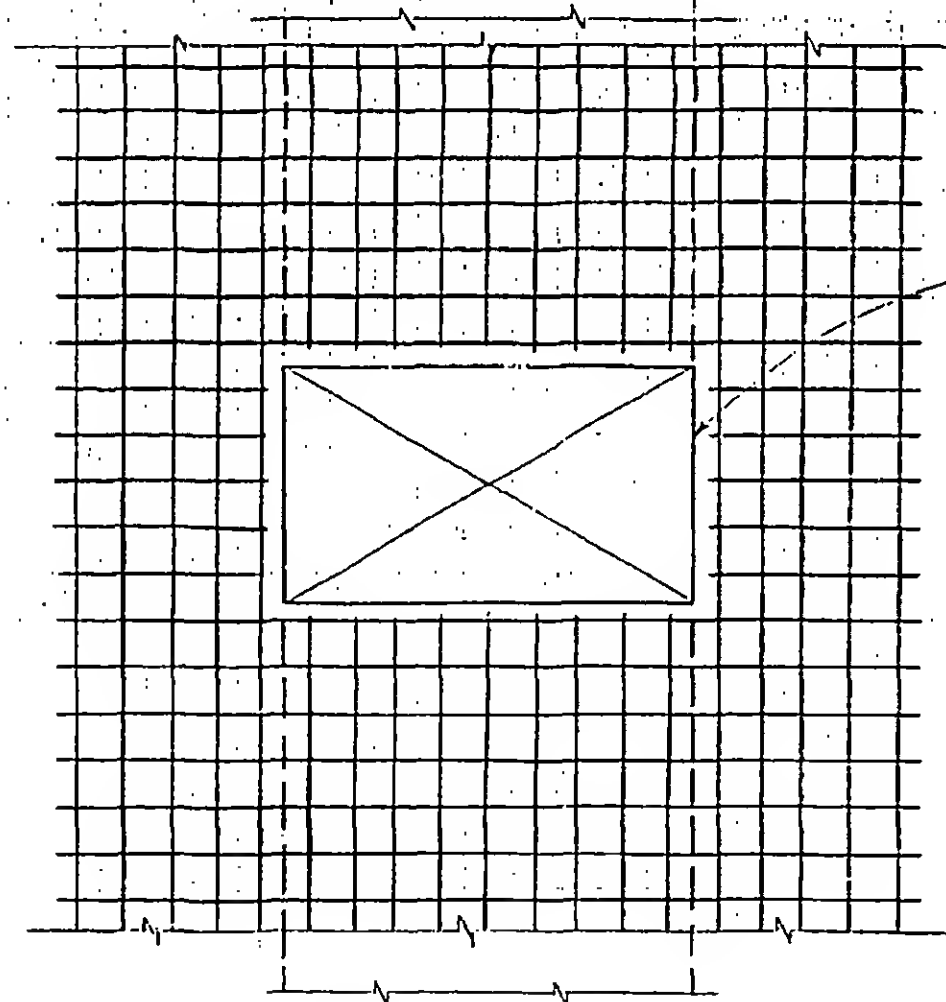
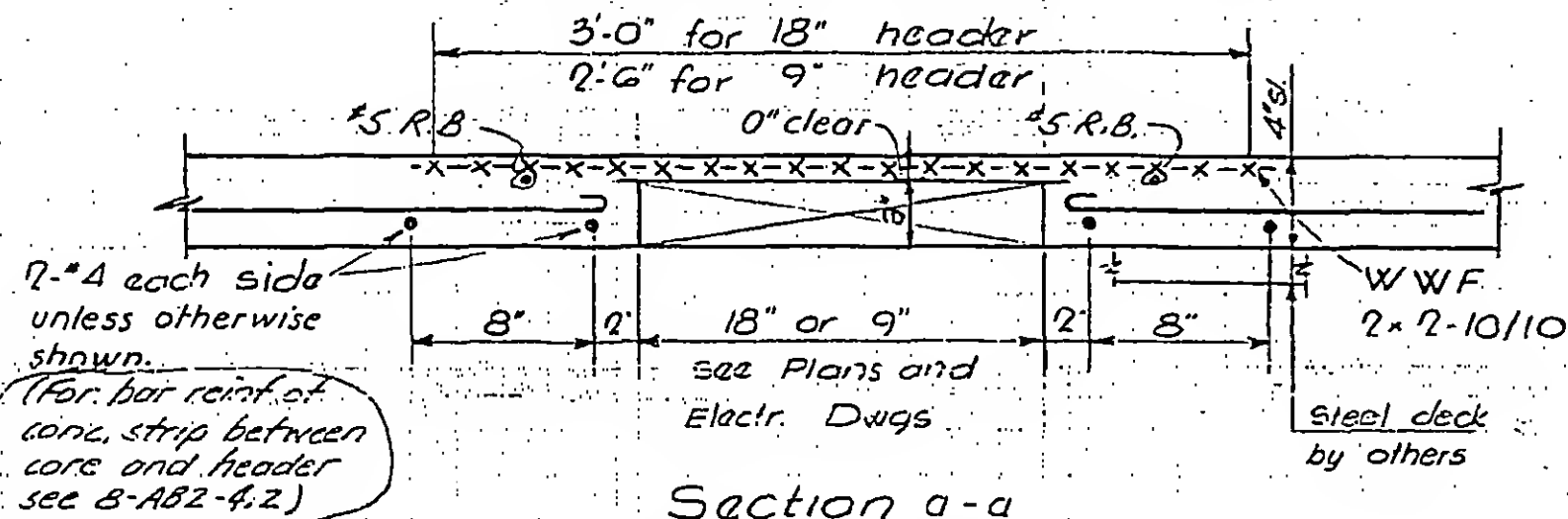
Structural &amp; Civil Engineers

PROJECT THE TRADE WORLD CENTER TITLE TYPICAL DETAIL OF 3" HEADER IN 4" SLAB

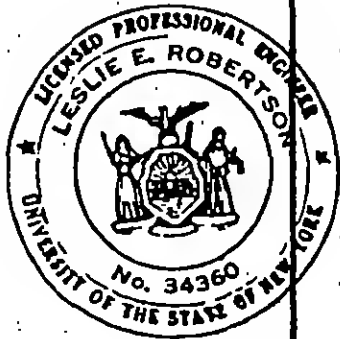
DATE 3-1-68

REVISIONS

3-12-69



Detail A - Plan  
Showing W.W.F. over Header



8-AB2-G.1

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT

THE WORLD TRADE CENTER

TITLE

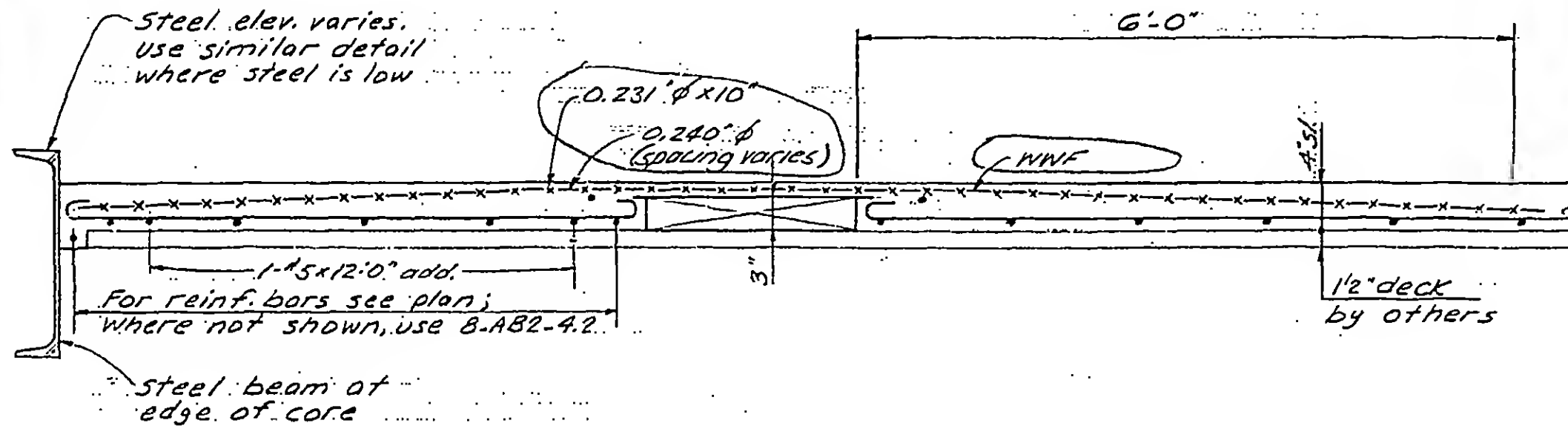
TYPICAL DETAIL OF 3" HEADER IN 4" SLAB

DATE

3-12-69

REVISIONS

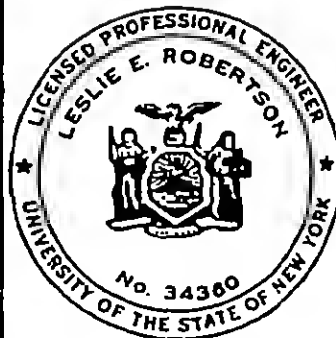
8-27-69

Section B-B

Same as Det. A on 8-AB2-6.1 except as shown

Notes

1. Lap deformed W.W.F. with 2 x 2 #10 W.W.F. in adjacent bay 4" min. between end wires. Laps over header not permitted.
2. Use this section only where shown in plan. Elsewhere, use Det. A on 8-AB2-6.1.



DESIGNED

DRAWN

ALF.

REVIEWED

WAB

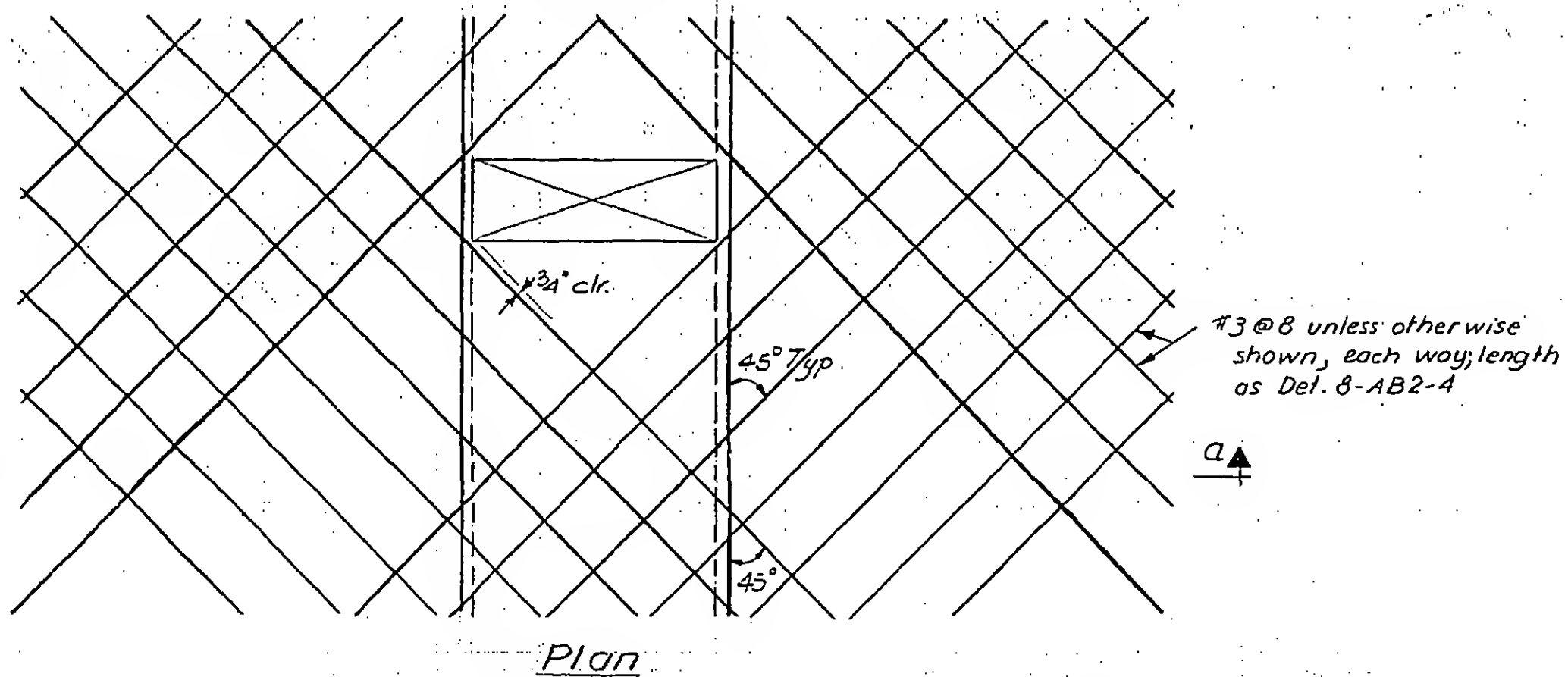
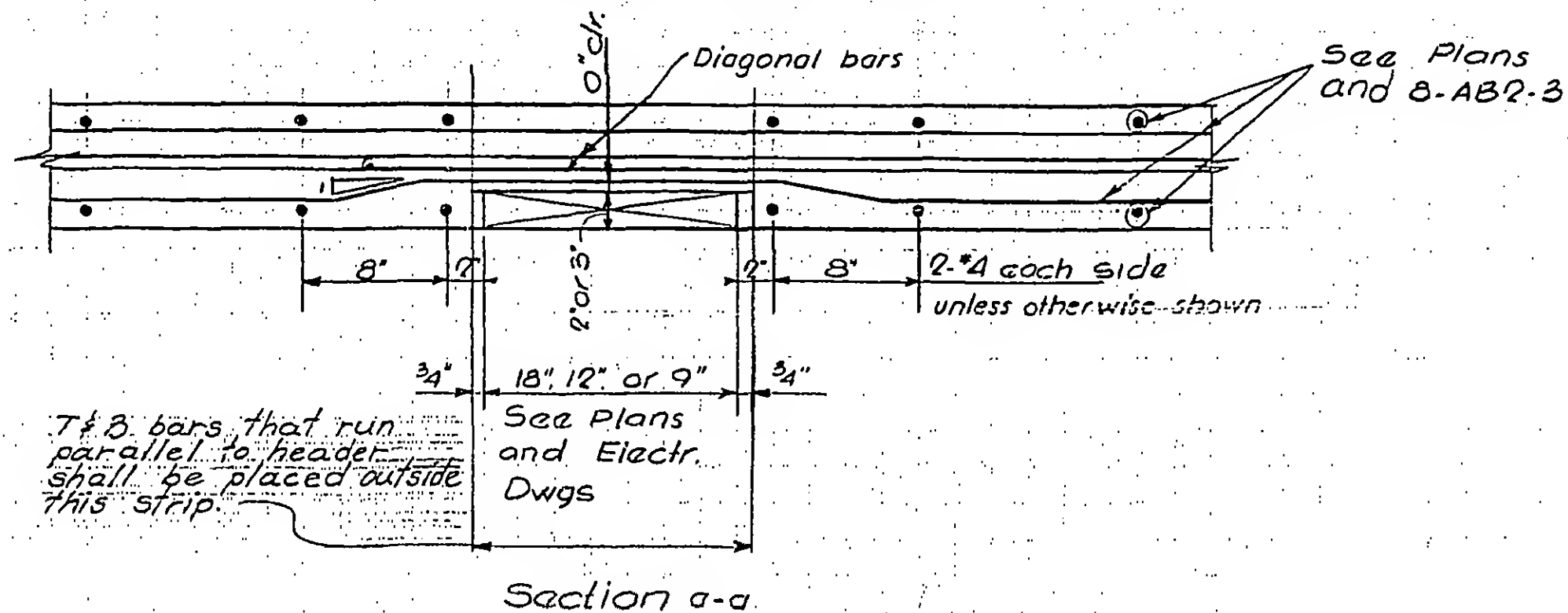
8-AB2-6.2

## Structural & Civil Engineers

TITLE DETAIL OF HEADER IN 7<sup>3</sup>/<sub>4</sub>" SLAB

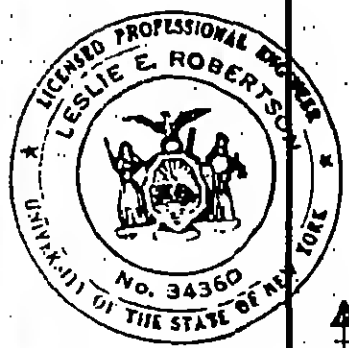
DATE 3-1-68

## REVISIONS



### Showing Diagonal 'D' Bars

8-AB2-7



## Structural & Civil Engineers

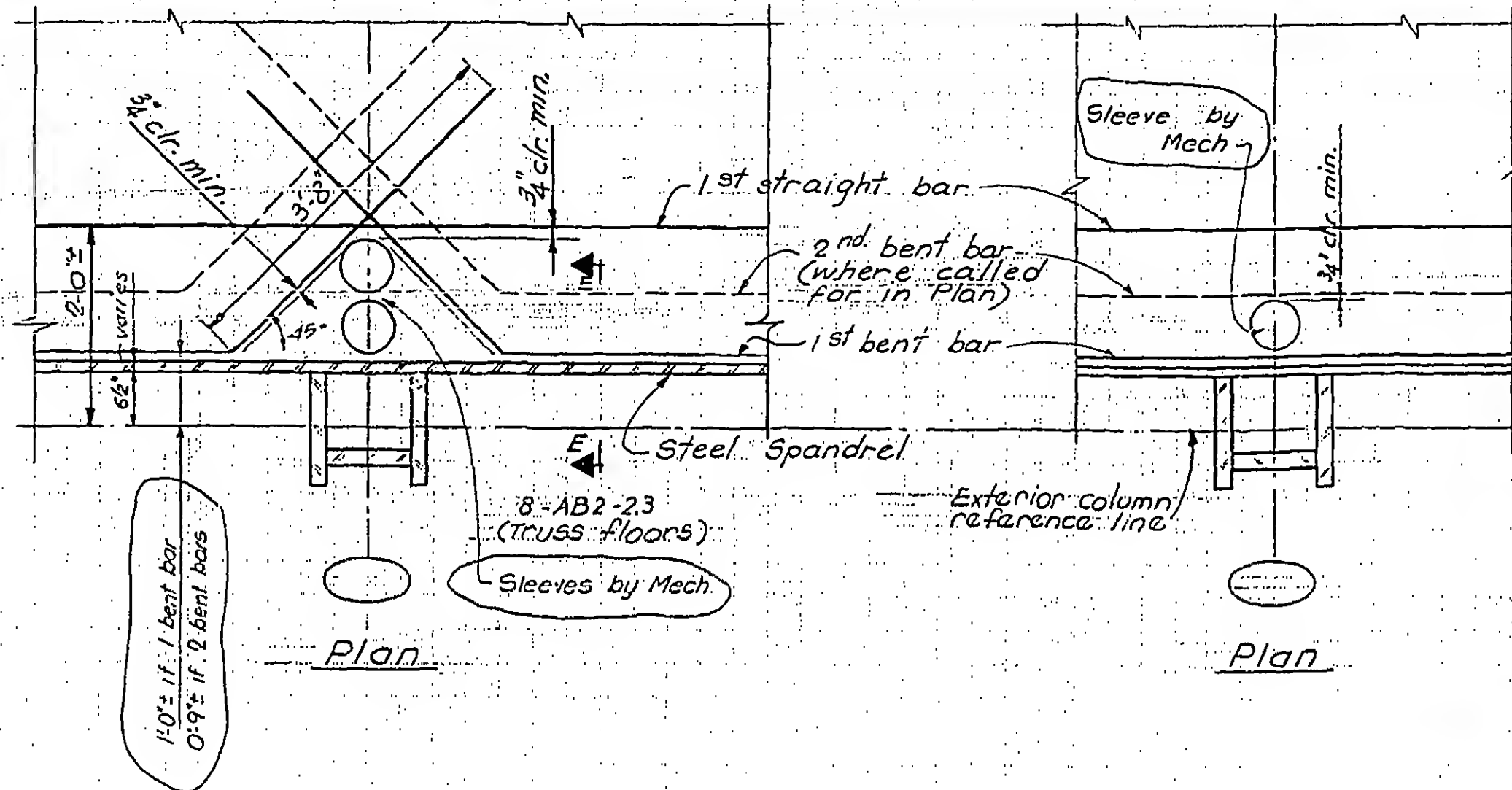
PROJECT THE WORLD TRADE CENTER

TITLE DETAIL AT SLEEVES NEAR EXTERIOR WALL

DATE 3-1-68

## REVISIONS

1-28-69



8-AB2-8.1

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

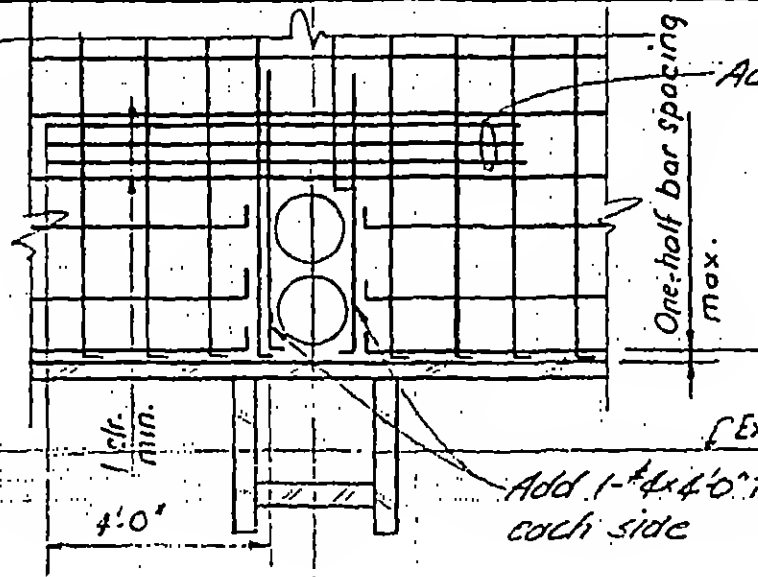
Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL DETAILS AT SLEEVES NEAR EXTERIOR WALL

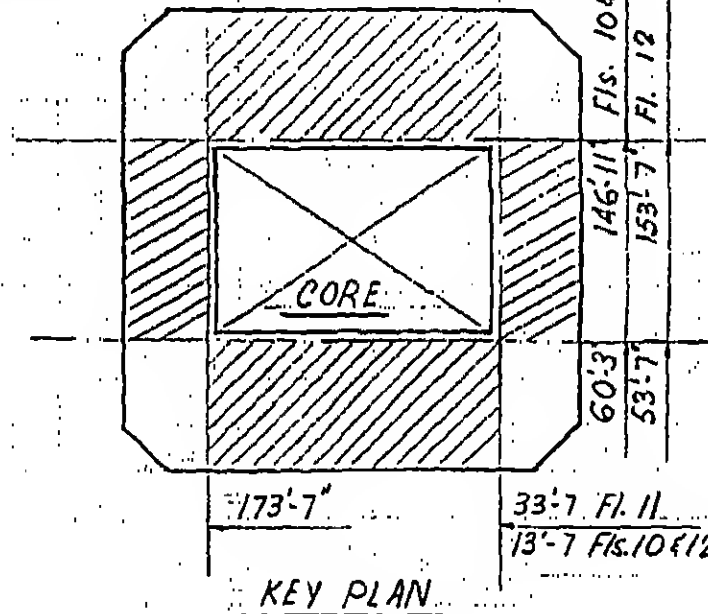
DATE 3-19-70

REVISIONS

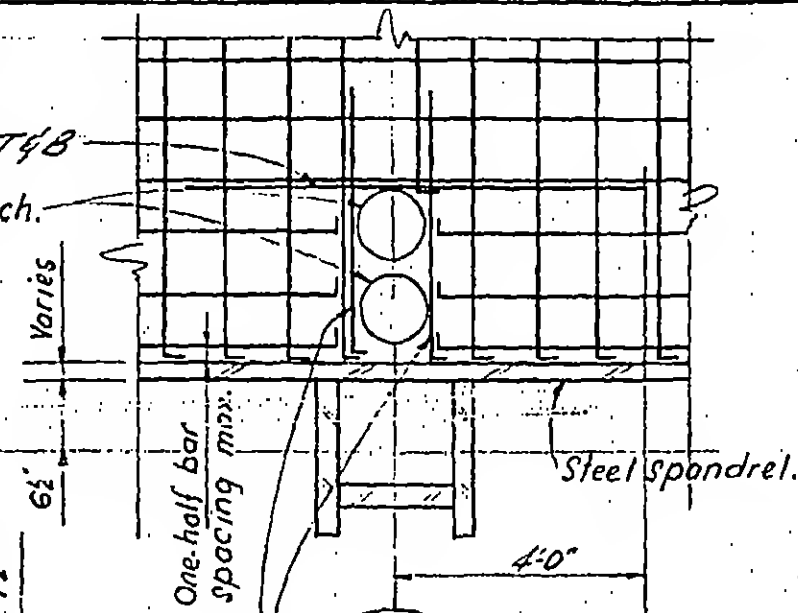


2 SLEEVES

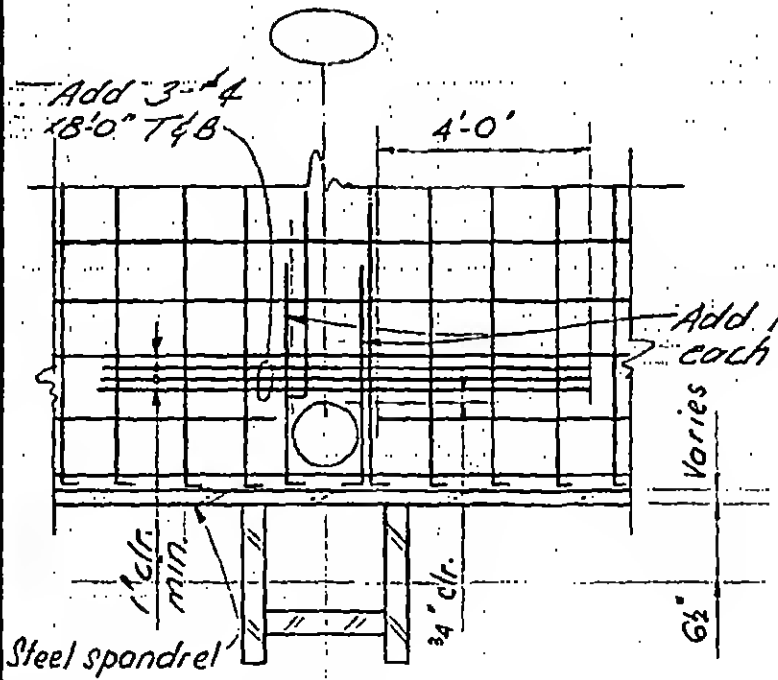
Ext. wall ref. line



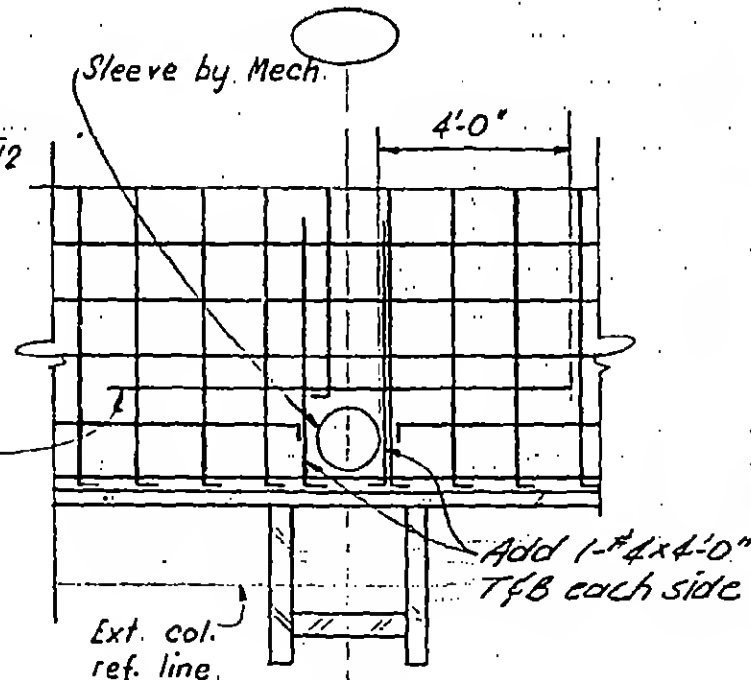
KEY PLAN



2 SLEEVES



1 SLEEVE



1 SLEEVE

AREA SHOWN SHADED IN KEY PLAN

AREA NOT SHADED IN KEY PLAN

Note: Hook all bars interrupted at sleeves.

8-AB2-8.2



DESIGNED T. O'Neill

DRAWN T. Terrelonge

REVIEWED

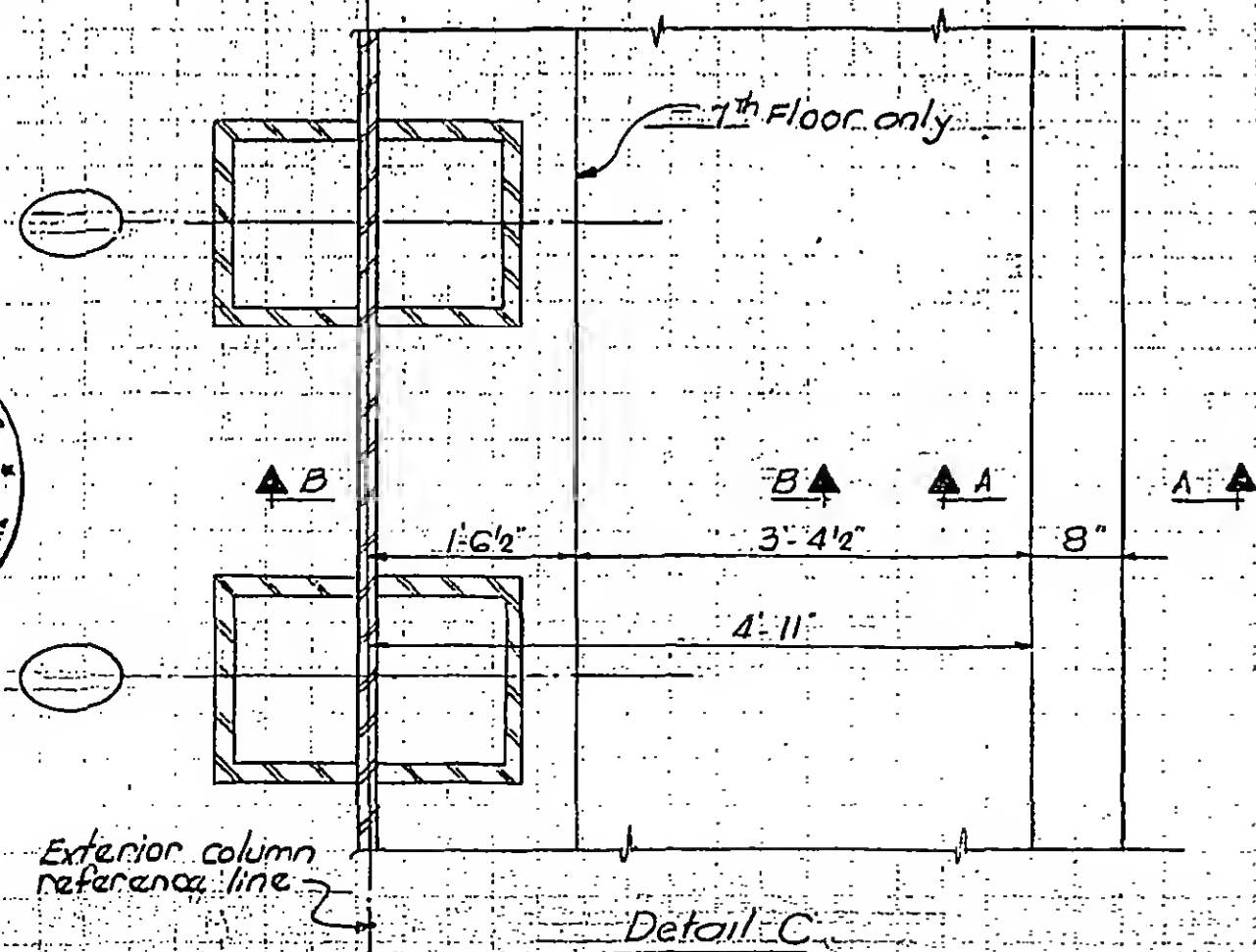
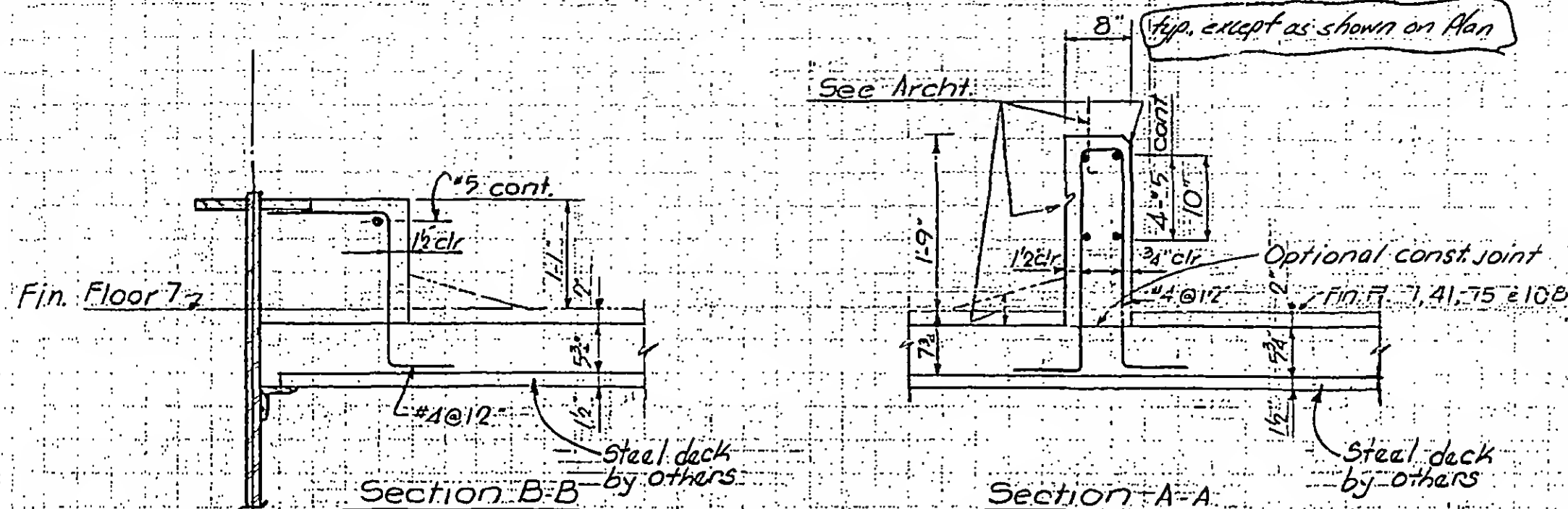
## Structural & Civil Engineers

TITLE EXTERIOR SILLS, CURBS AND PARAPETS

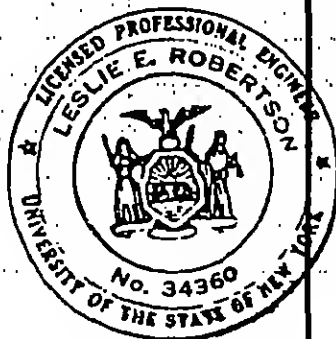
DATE 3-1-68

## REVISIONS

1-28-69  
12-1-70  
12-1-71



8-AB2-10.1



SKILLING - HELLE - CHRISTIANSEN - ROBERTSON

Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

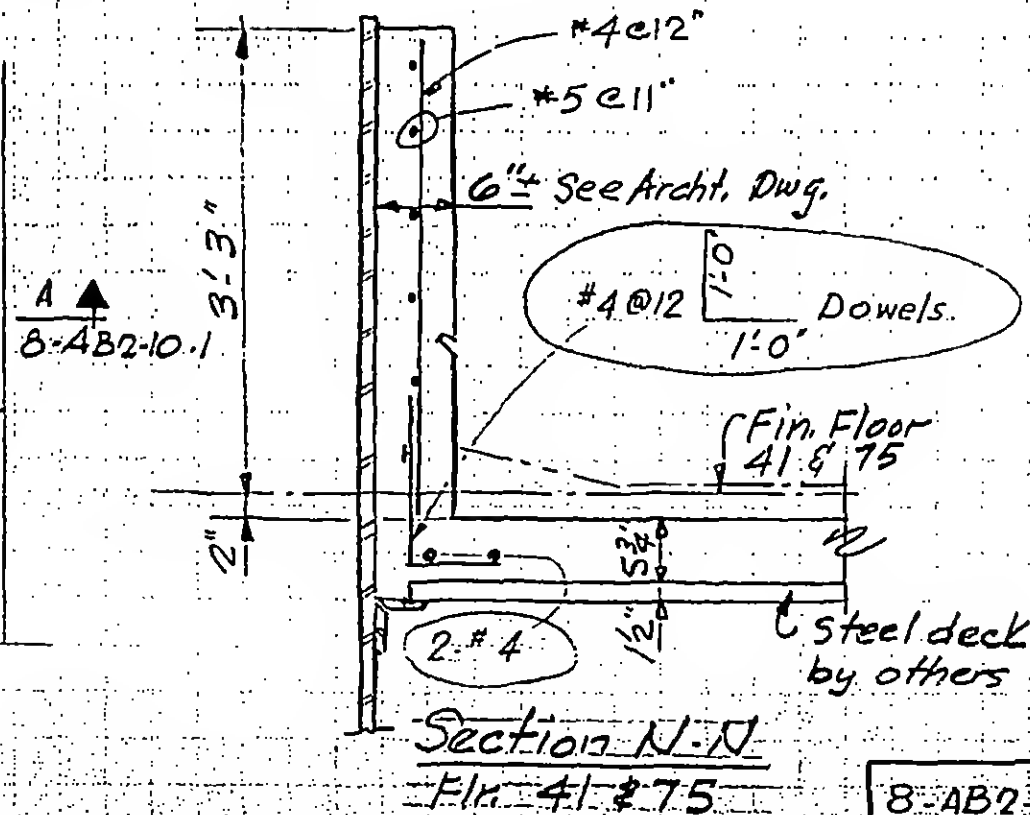
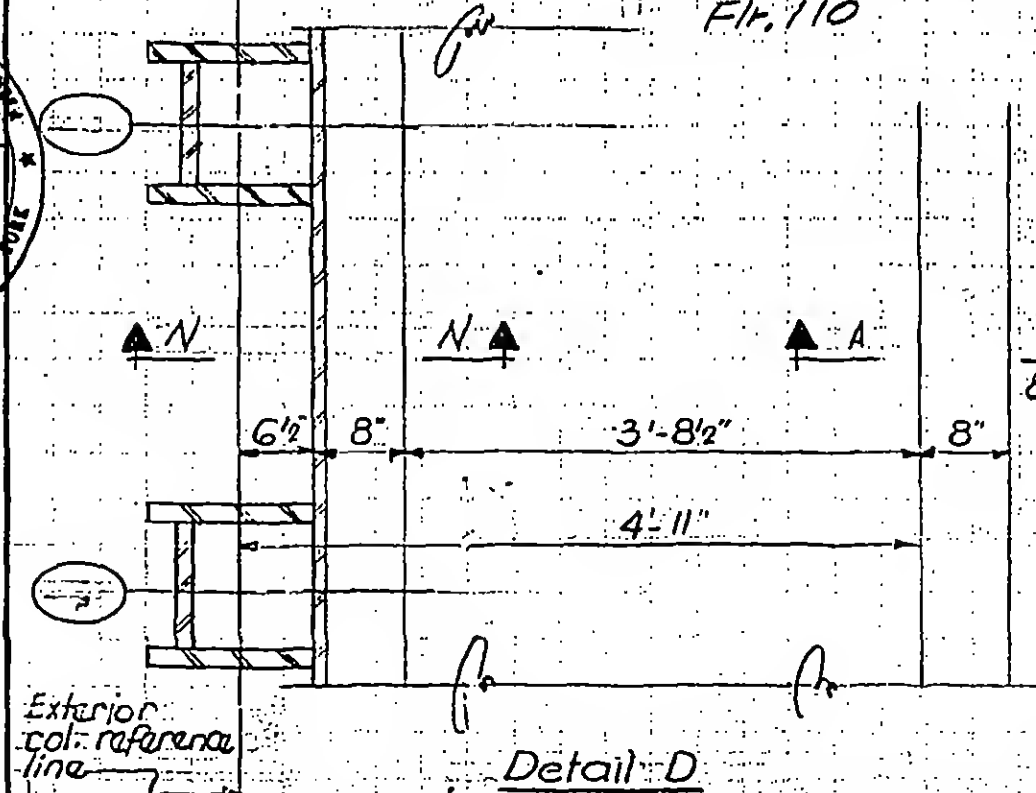
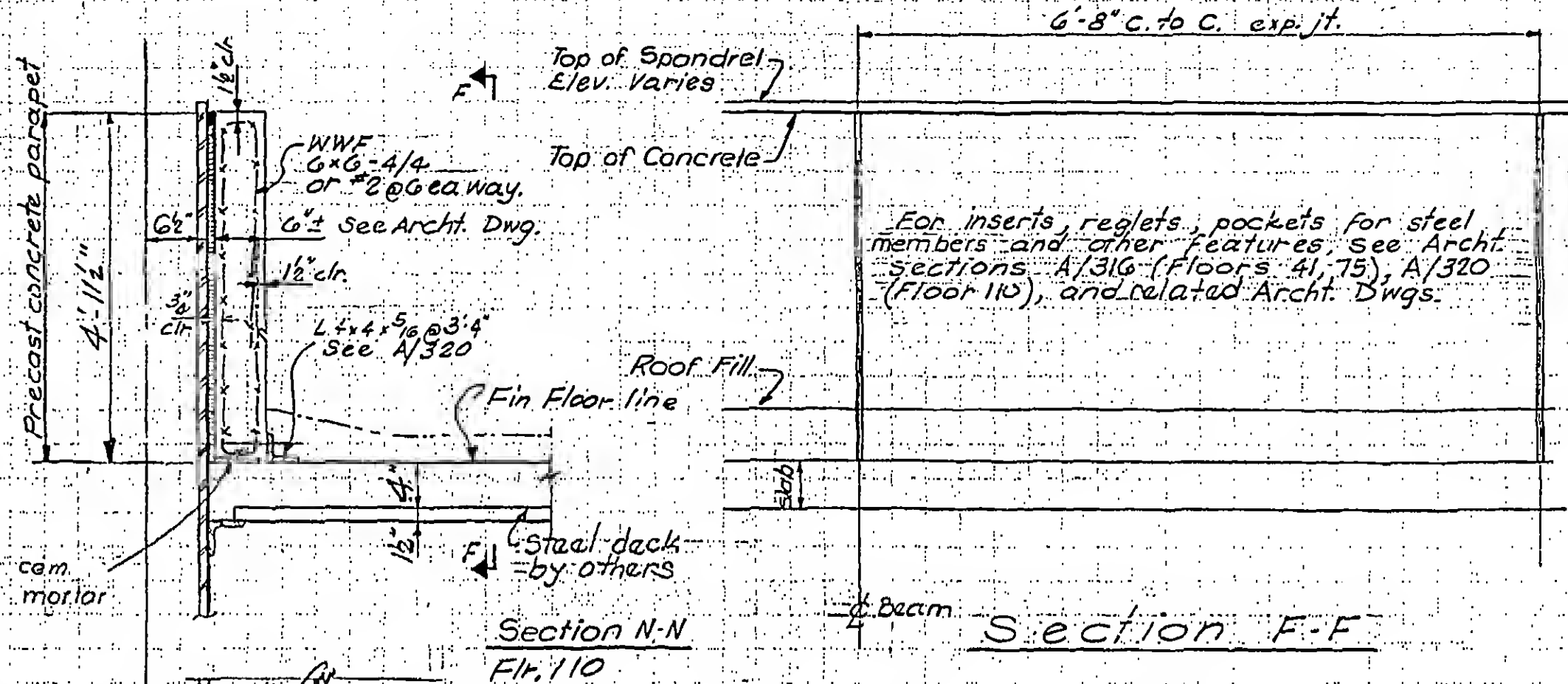
TITLE EXTERIOR SILLS, CURBS AND PARAPETS

DATE 3-1-68

## REVISIONS

5/31/68

10-24-69



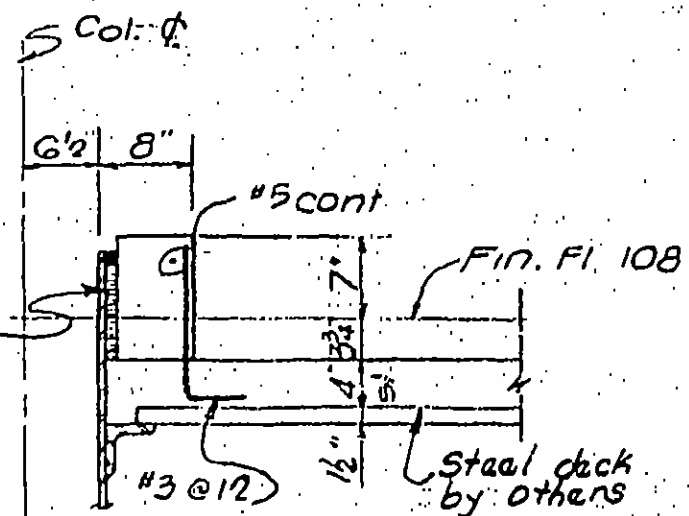
PROJECT THE WORLD TRADE CENTER

TITLE EXTERIOR SILLS, CURBS AND PARAPETS

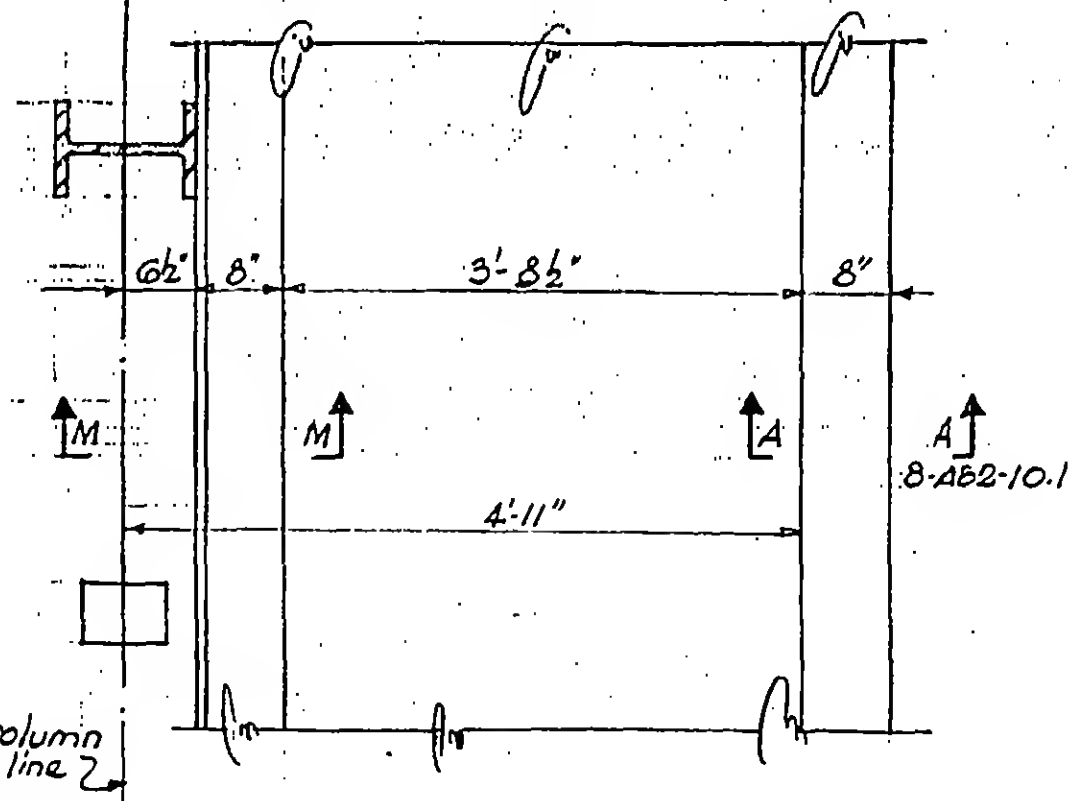
DATE 3-1-68

## REVISIONS

Filler - see  
Arch. Det.  
A / 320



Section M-M



Detail E



8-AB2-10.3



SKILLING - HELLE - CHRISTIANSEN - ROBERTSON

Structural &amp; Civil Engineers

PROJECT

THE WORLD TRADE CENTER

TITLE

EXTERIOR SILLS, CURBS AND PARAPETS

DATE

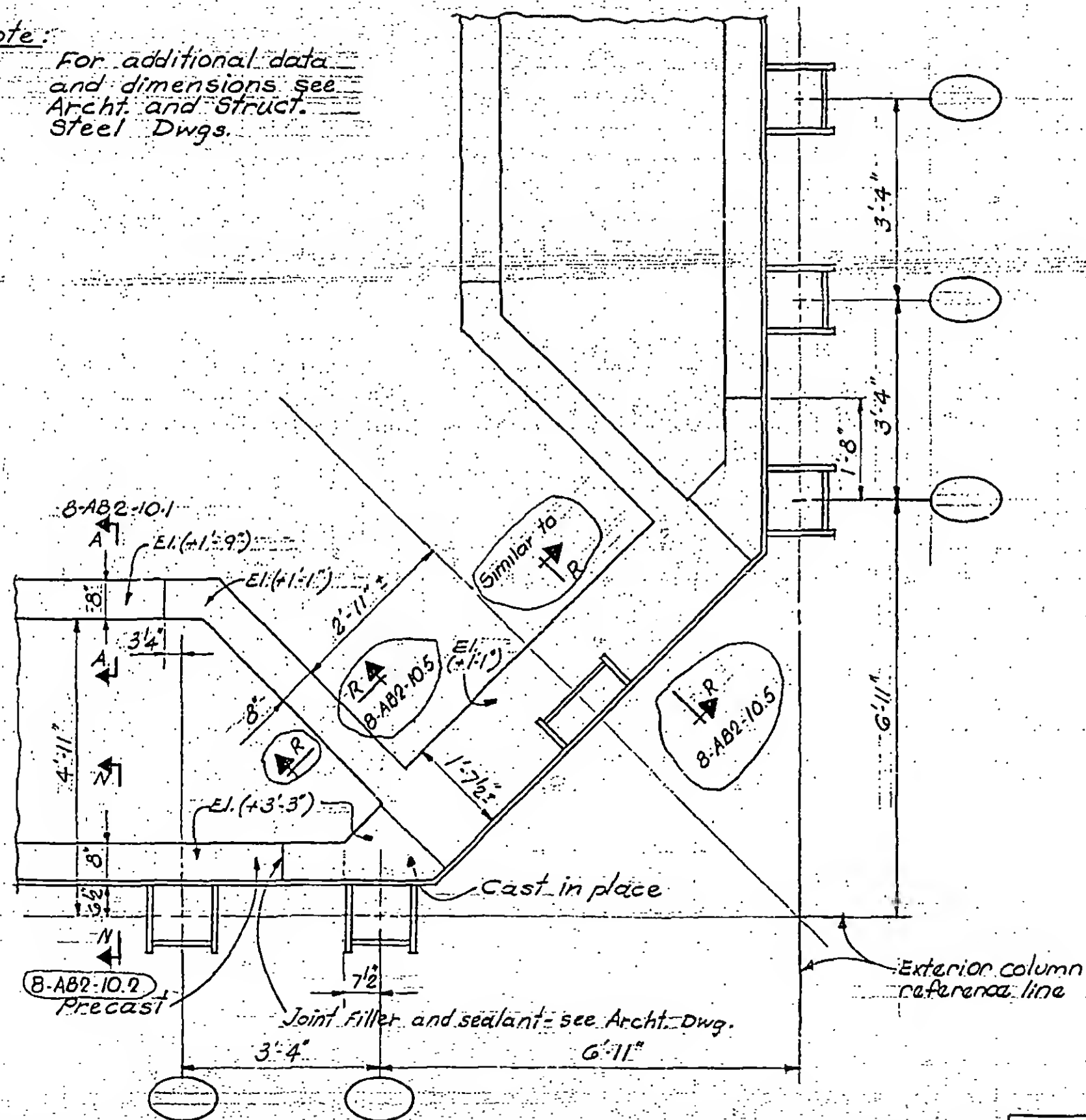
3-1-68

REVISIONS

1-28-69

Note:

For additional data  
and dimensions see  
Archit. and Struct.  
Steel Dwgs.



Detail P

Corner Parapets and Curbs Fl. 41 &amp; 75

8-AB2-10.4



## Structural & Civil Engineers

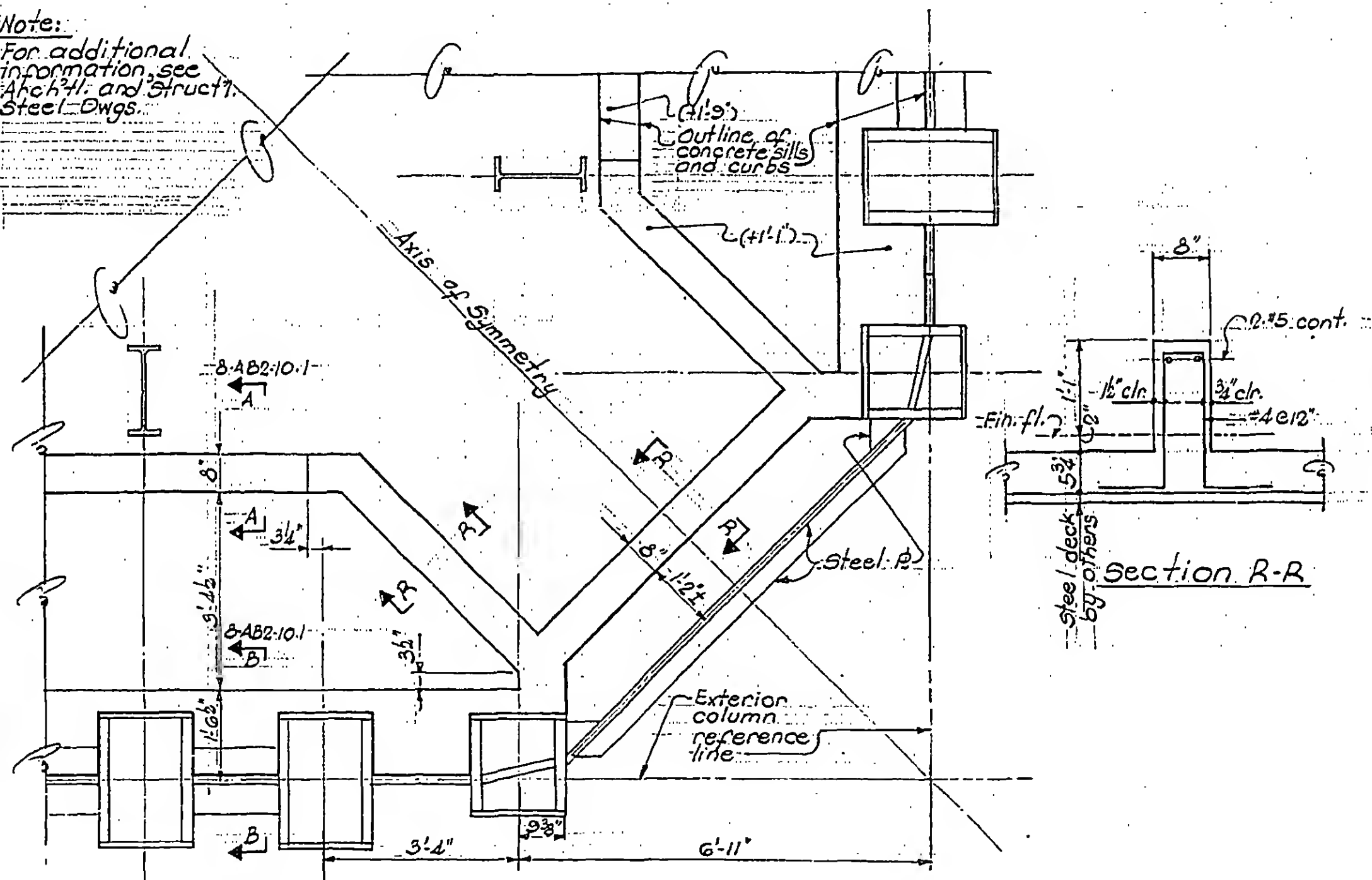
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| TITLE | EXTERIOR SILLS, CURBS AND PARAPETS |
|-------|------------------------------------|

DATE 9-5-68

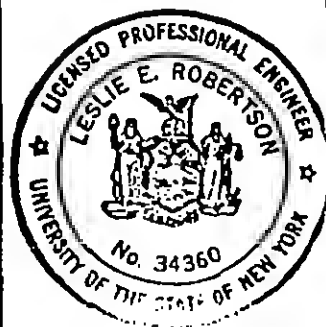
## REVISIONS

Note:

For additional information, see Arch 211 and Struct 1 Steel Dwg's.



DETAIL Q. CORNER CURBS AND SILLS, FLOOR 7



**DESIGNED**

**DRAWING**

**REVIEWED**

-8-AB2-10.5

REVISIONS

12-1-70

Cut bars "B"

Typ Bars A  
see Plan

Edge Bars "C"

VF

Cut bars "B"

Symm. abt.  
of opng  
Bars "D" similar  
to other corner

Symm. abt.  
of opng

3" Typ  
for Bars "D"

3" cl.

Diag. Bars "D"

45°

3'-0"

for Bars "C"

2'-0"

50% of Bars "D"

4'-0"

50% of Bars "D"

1'-0"

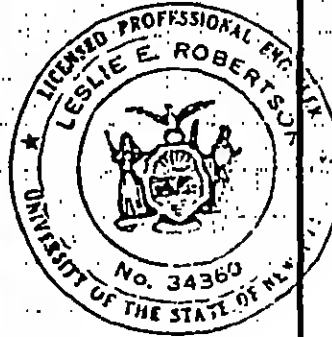
50% of Bars "D"

3'-0"

50% of Bars "D"

Notes

1. Unless otherwise shown on plans provide:  
 5 # 6 Top & bott. floor  
 2 # 6 Top & bott. floor  
 9, 41, 43, 75, 77  
 3 # 6 one layer all other floors



No. of Bars at Opng.

$$\text{No. of Bars "C" (1/2 ea. side)} = 0.50 \pm \times \text{No. of Bars "B" (each layer)}$$

B-AB2-II

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

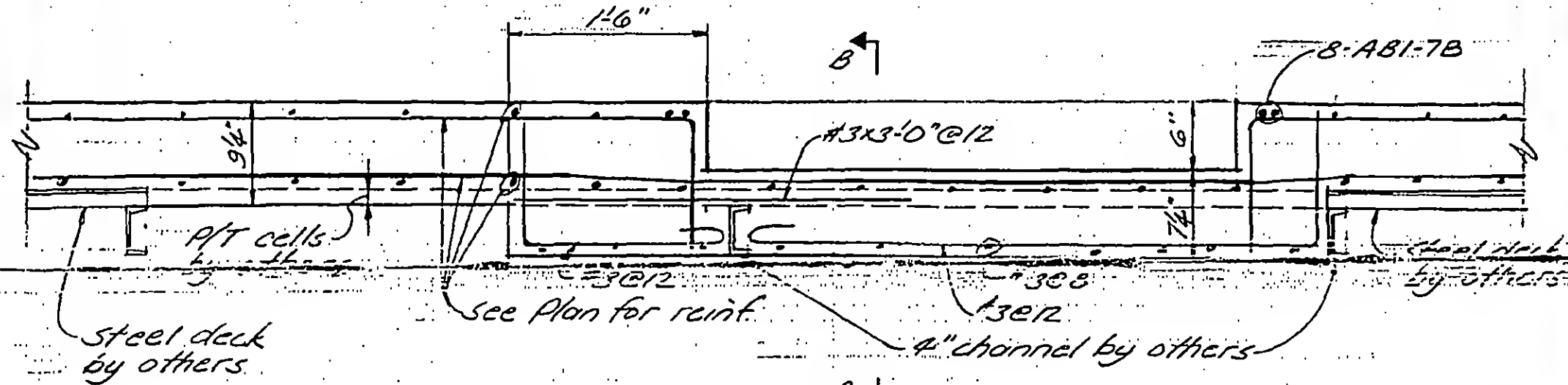
Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER

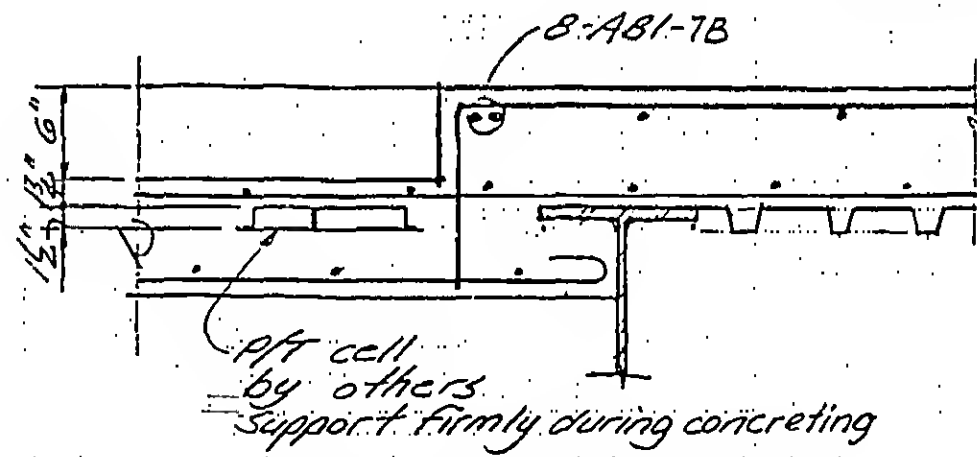
TITLE SECTIONS AT FLOOR DEPRESSION

DATE 10-24-69

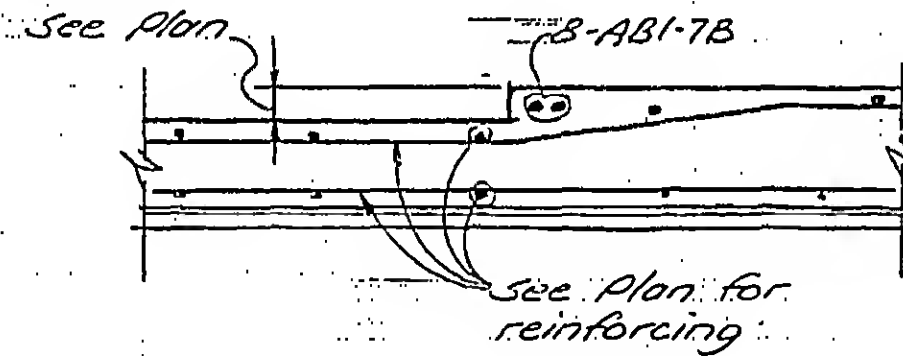
REVISIONS



Section A-A



Section B-B



Section C-C



DESIGNED

DRAWN

REVIEWED

8-AB2-12

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT

THE WORLD TRADE CENTER

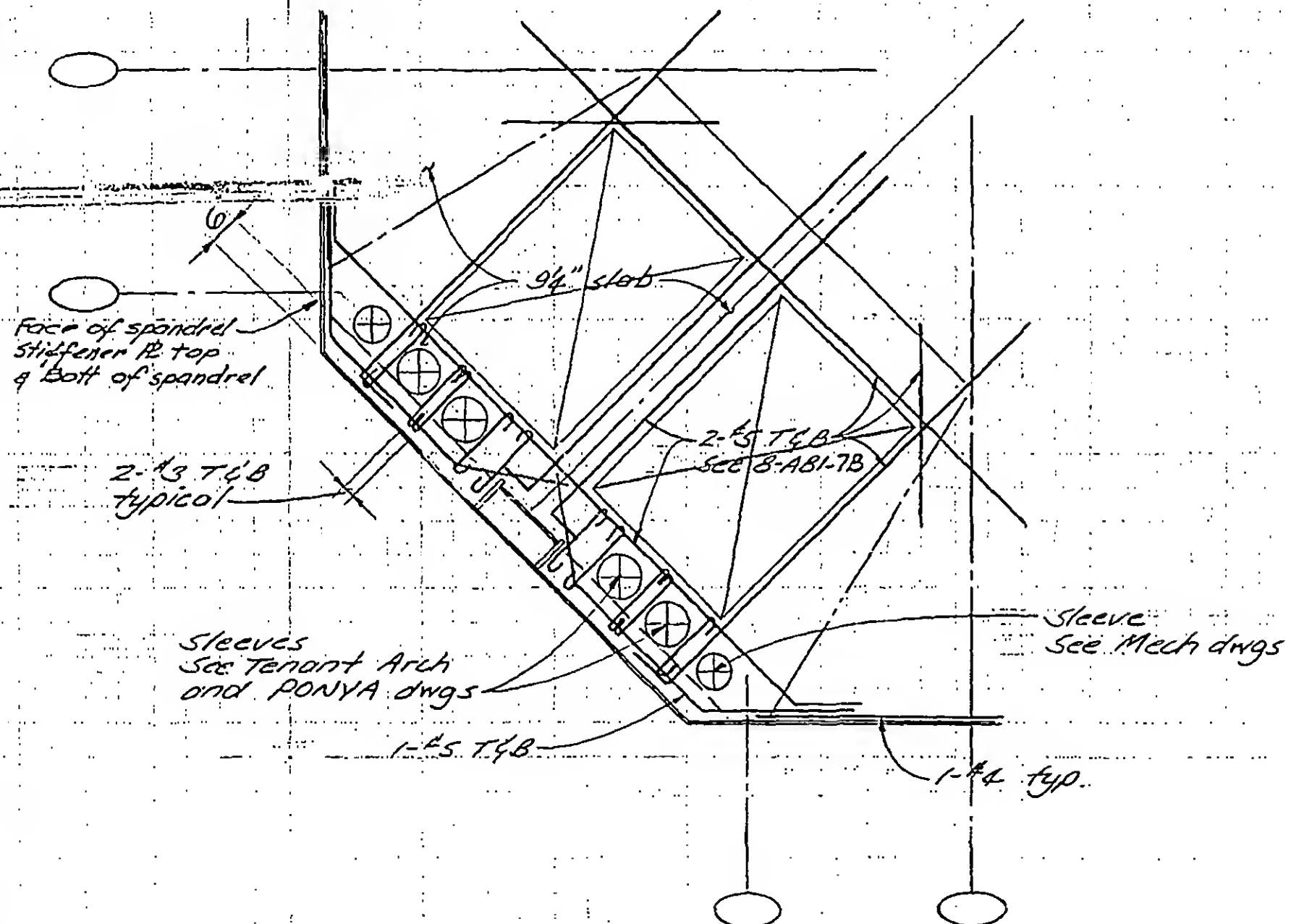
TITLE

FLOOR OPENING DETAILS

DATE

10-24-69

REVISIONS



Detail A  
Floor 43



DESIGNED

DRAWN

REVIEWED

8-AB2-13.1

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

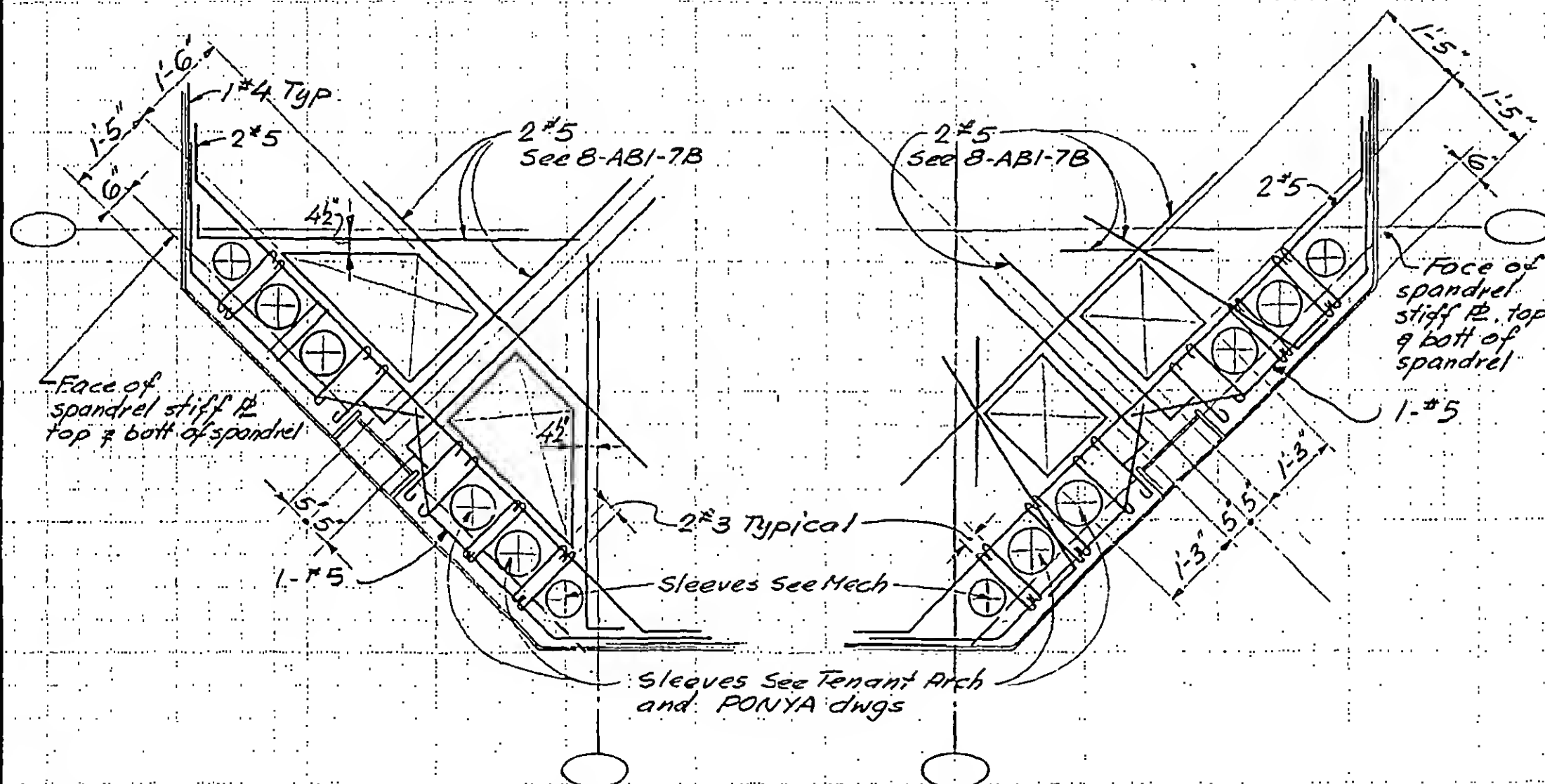
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE FLOOR OPENING DETAIL

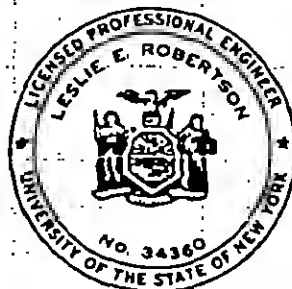
DATE 10-24-69

## REVISIONS



Detail B  
Floor 44

Detail C  
Floor 44



DESIGNED

DRAWN

J. Gracius

REVIEWED

8-AB2-13.2

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT

THE WORLD TRADE CENTER

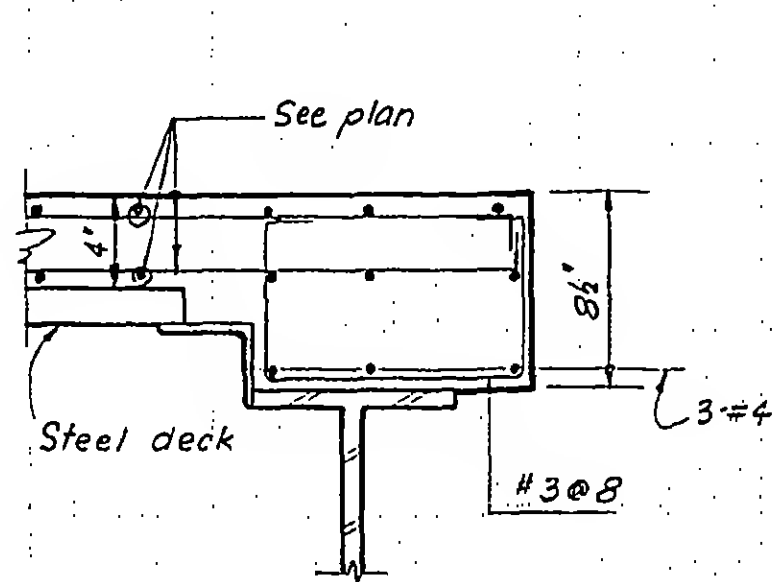
TITLE

TYPICAL SECTIONS THRU CORE WALL

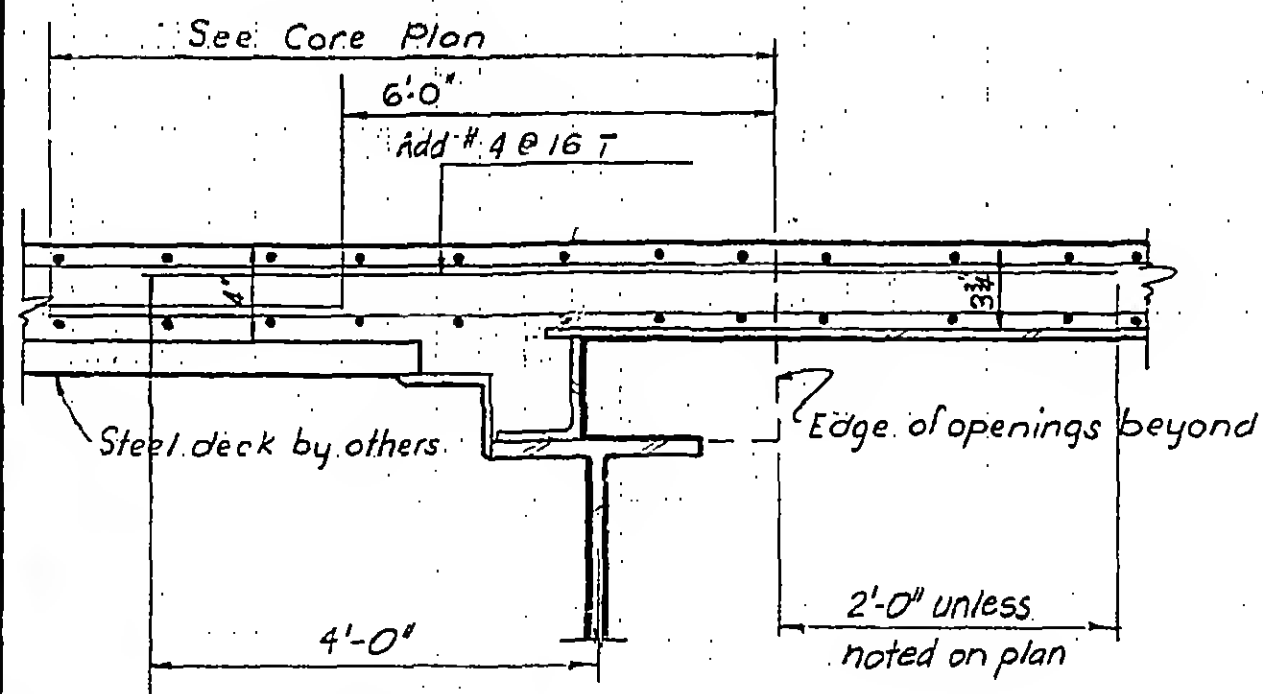
DATE

3/19/70

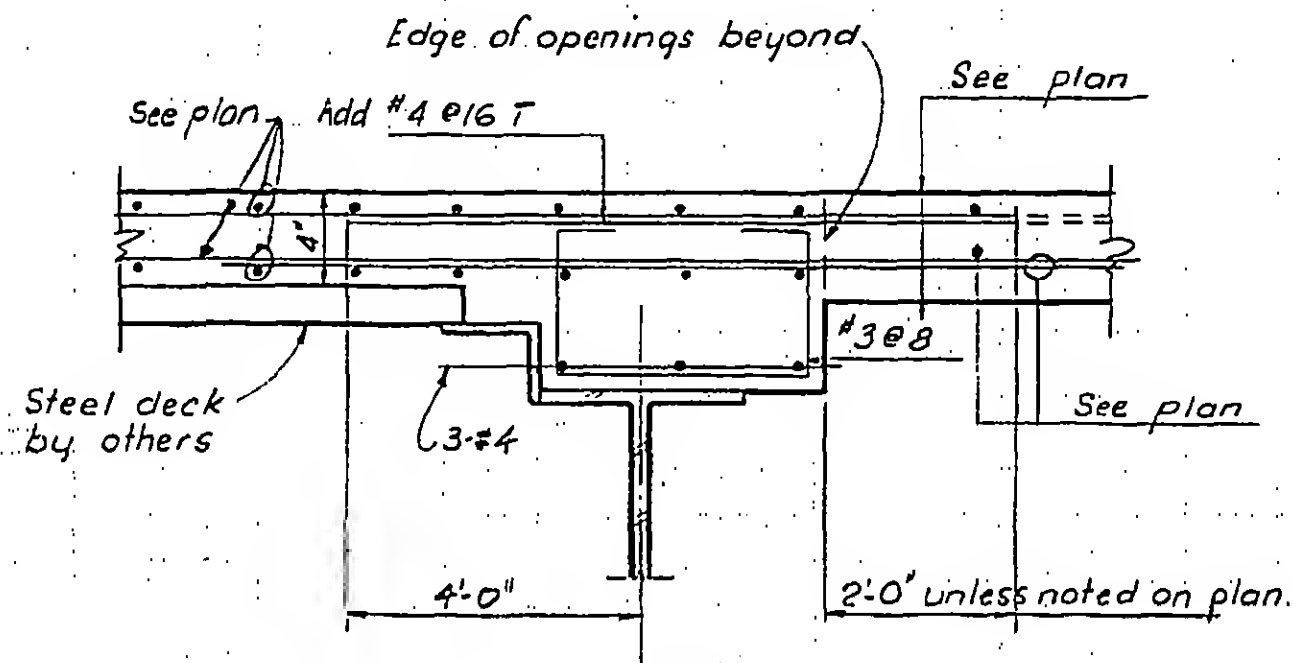
REVISIONS



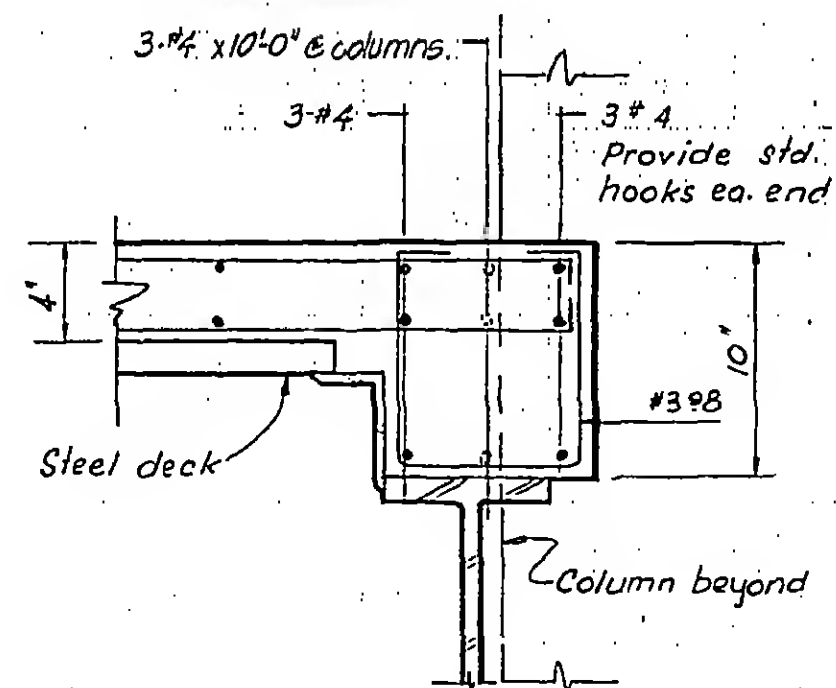
SECTION A-A



SECTION C-C



SECTION B-B



SECTION D-D



DESIGNED

T. O'Neill

DRAWN

T. Terrelonge

REVIEWED

8-AB2-1A.1

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT

THE WORLD TRADE CENTER

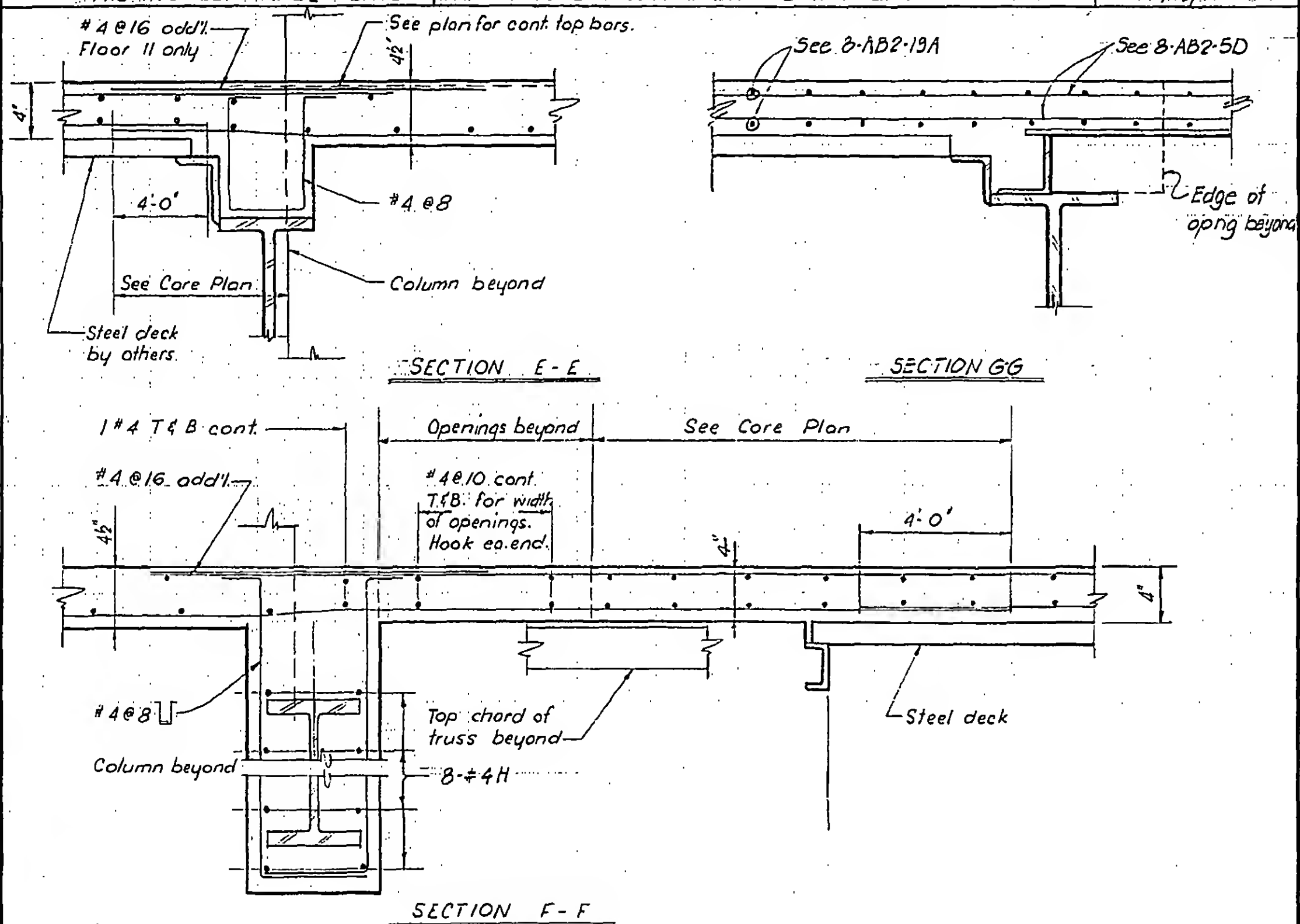
TITLE

TYPICAL SECTIONS THRU CORE WALL

DATE

3/19/70

REVISIONS



DESIGNED

T. O'Neill

DRAWN

T. Terrelonge

REVIEWED

8-AB2-14.2



SKILLING, HELLE. CHRISTIANSEN, ROBERTSON

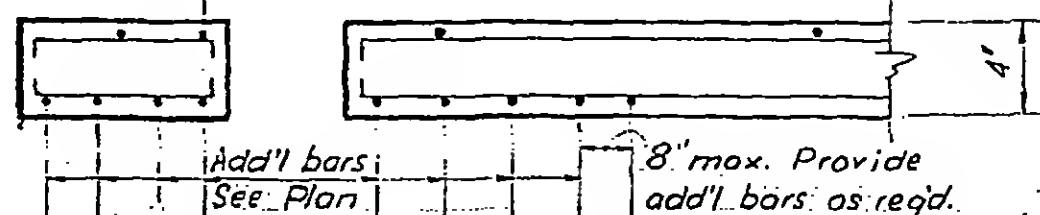
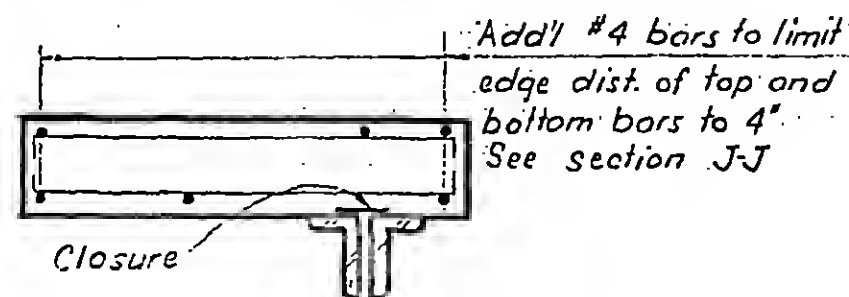
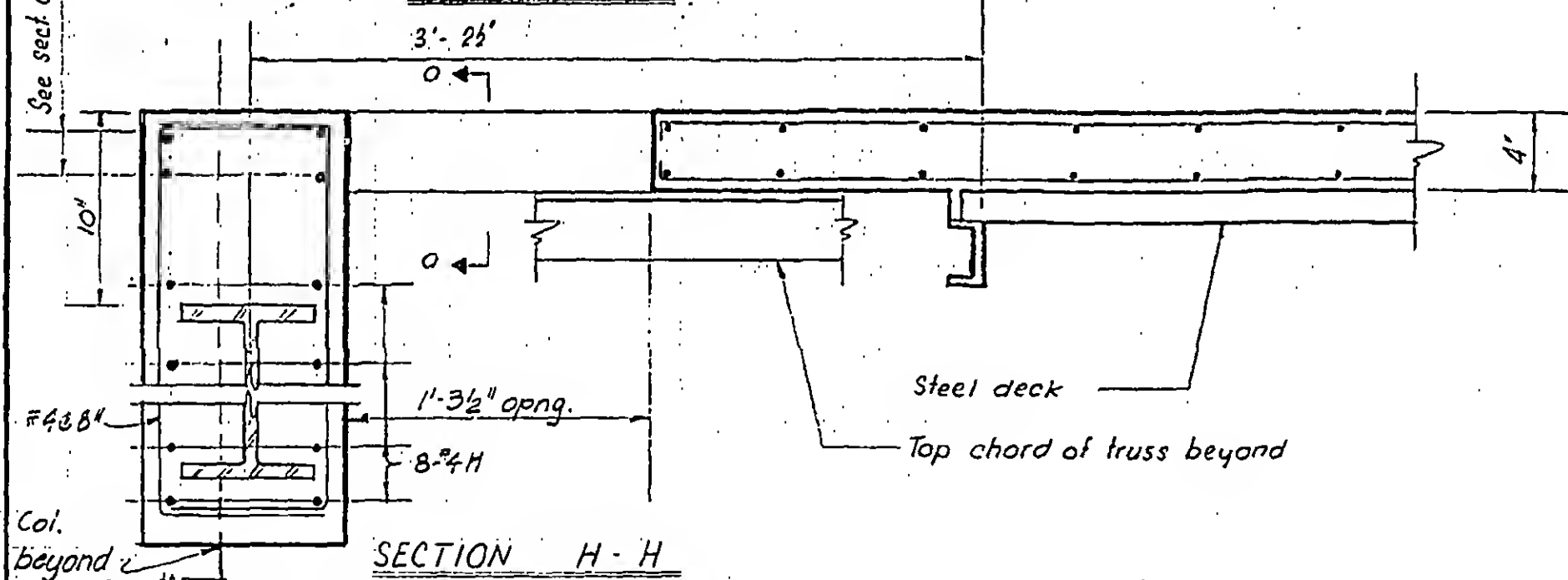
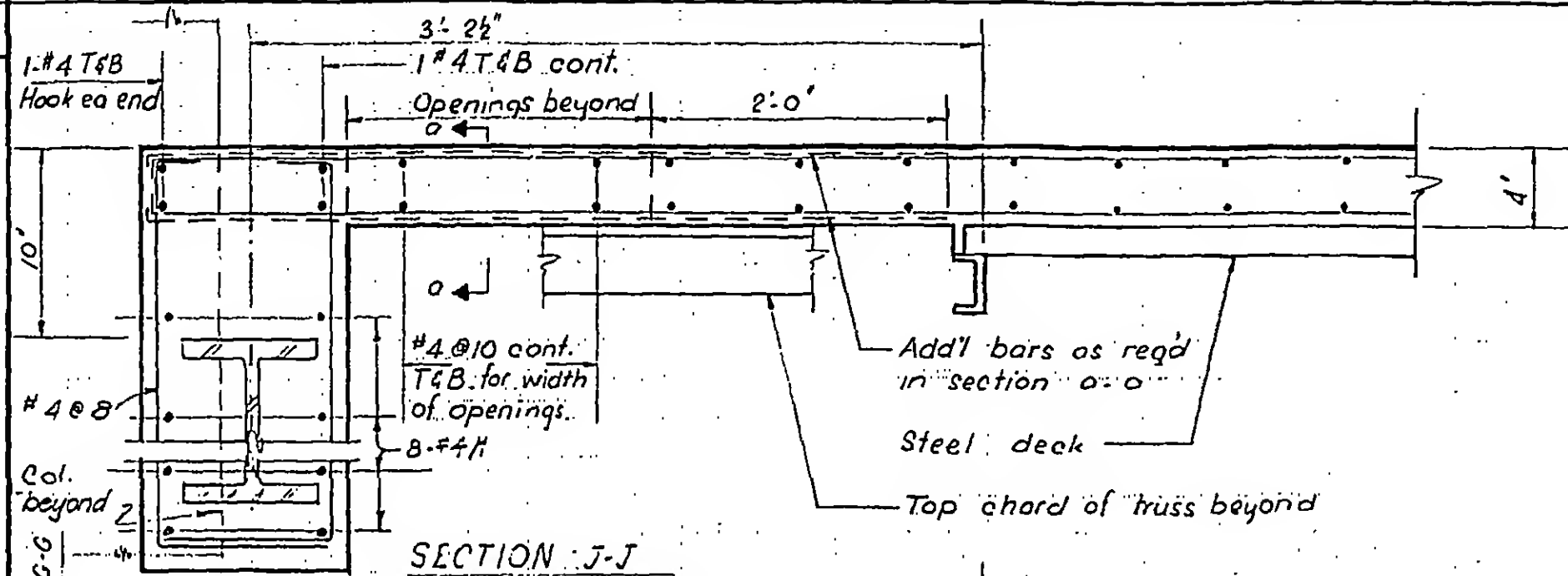
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL SECTIONS THRU CORE WALL

DATE 3-19-70

REVISIONS



Section a-a

8-AB2-14.3

DESIGNED  
T. O'NeillDRAWN  
T. Terrelonge

REVIEWED

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

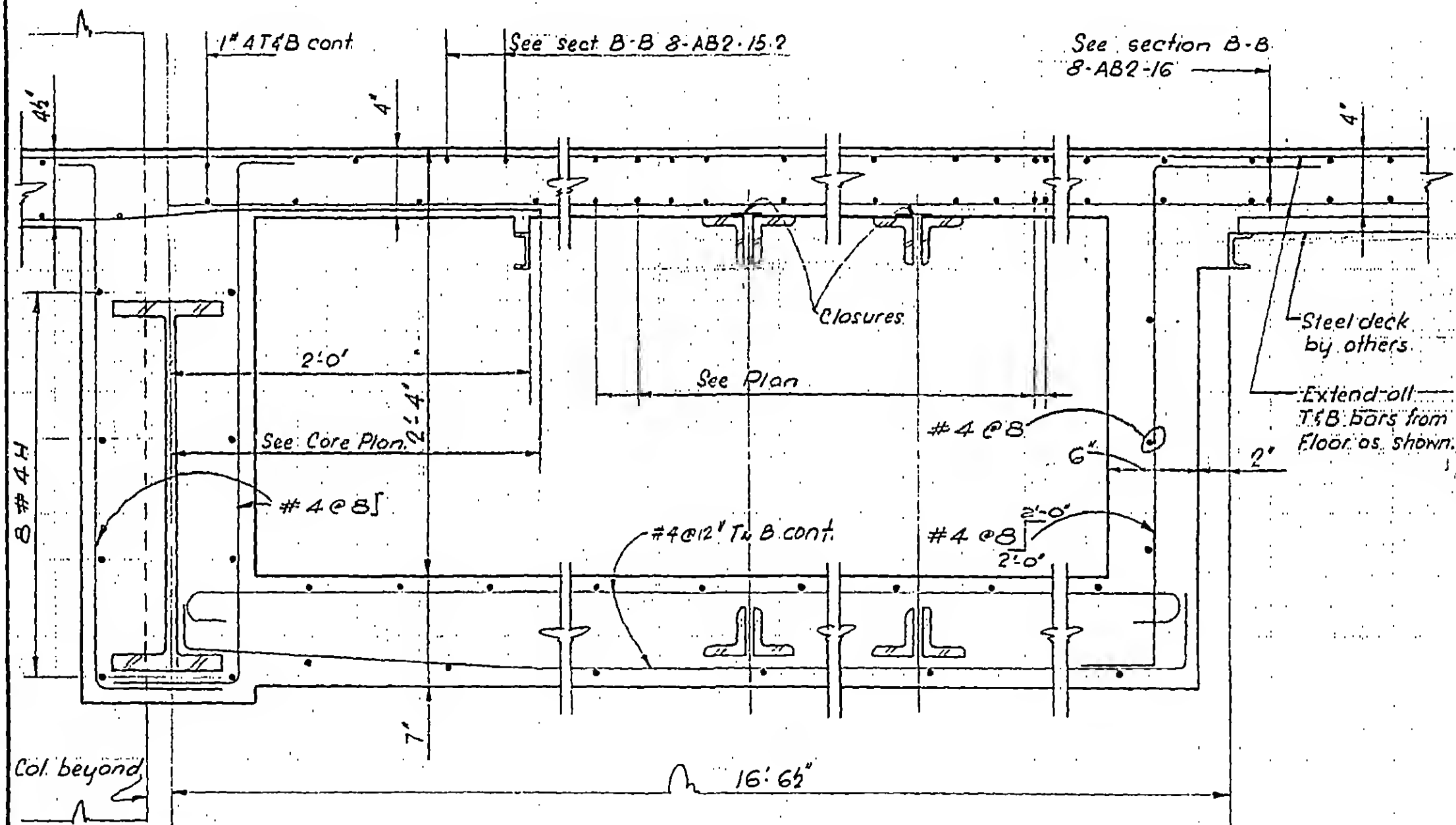
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE DETAILS AT SPlicing CHAMBER

DATE 3-19-70

REVISIONS



SECTION A - A

DESIGNED  
T. O'NeillDRAWN  
T. Terrelonge

REVIEWED

8-AB2-15.1

## Structural & Civil Engineers

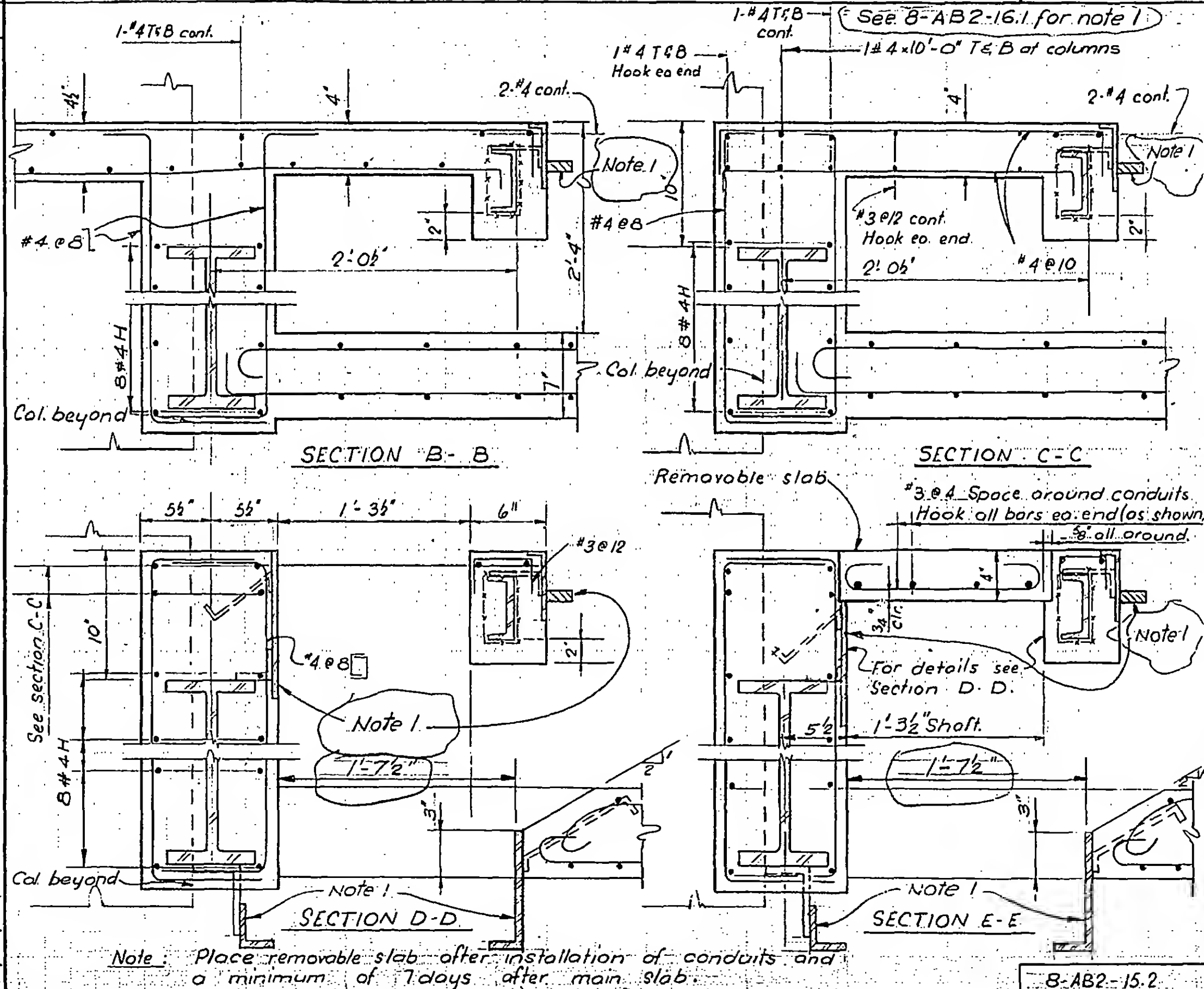
PROJECT *THE WORLD TRADE CENTER*

TITLE... DETAILS AT SPLICING CHAMBER

DATE 3-19-70

## REVISIONS

5/22/70



DESIGNED  
T. O'Neill

DRAWN  
T. Terrelonge

REVIEWER

8-AB2-15.2

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

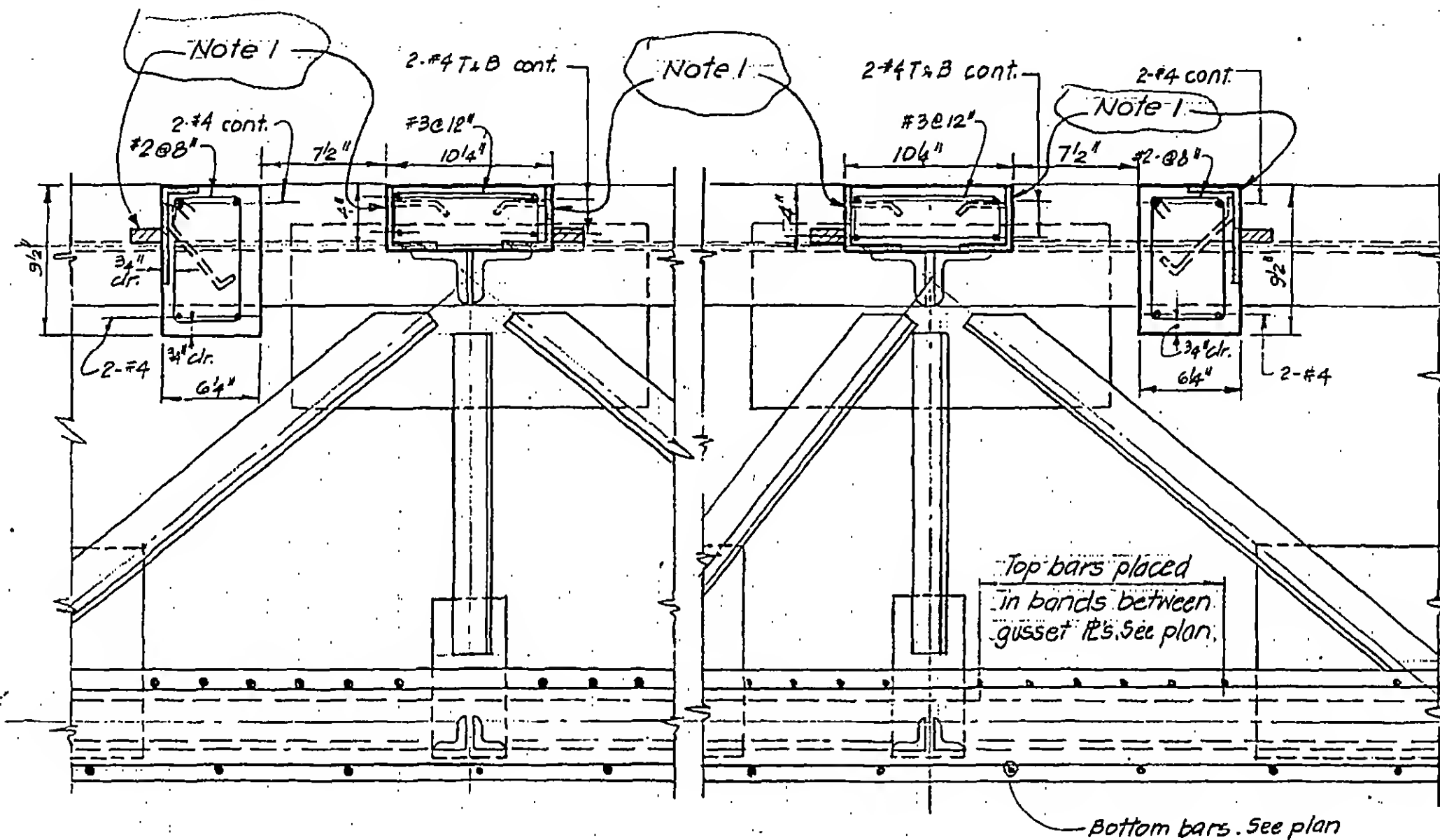
PROJECT THE WORLD TRADE CENTER

TITLE DETAILS AT SPlicing CHAMBER

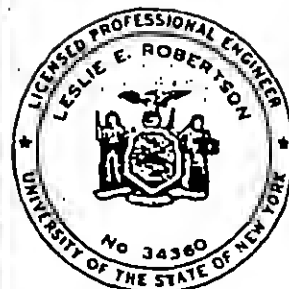
DATE 3/19/70

REVISIONS

5/22/70

SECTION A-A

Note 1 For embedment details  
see Pope, Evans & Robbins Drawings  
68330 - S100



DESIGNED

DRAWN

V.H.A.

REVIEWED

8-AB2-16.1

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

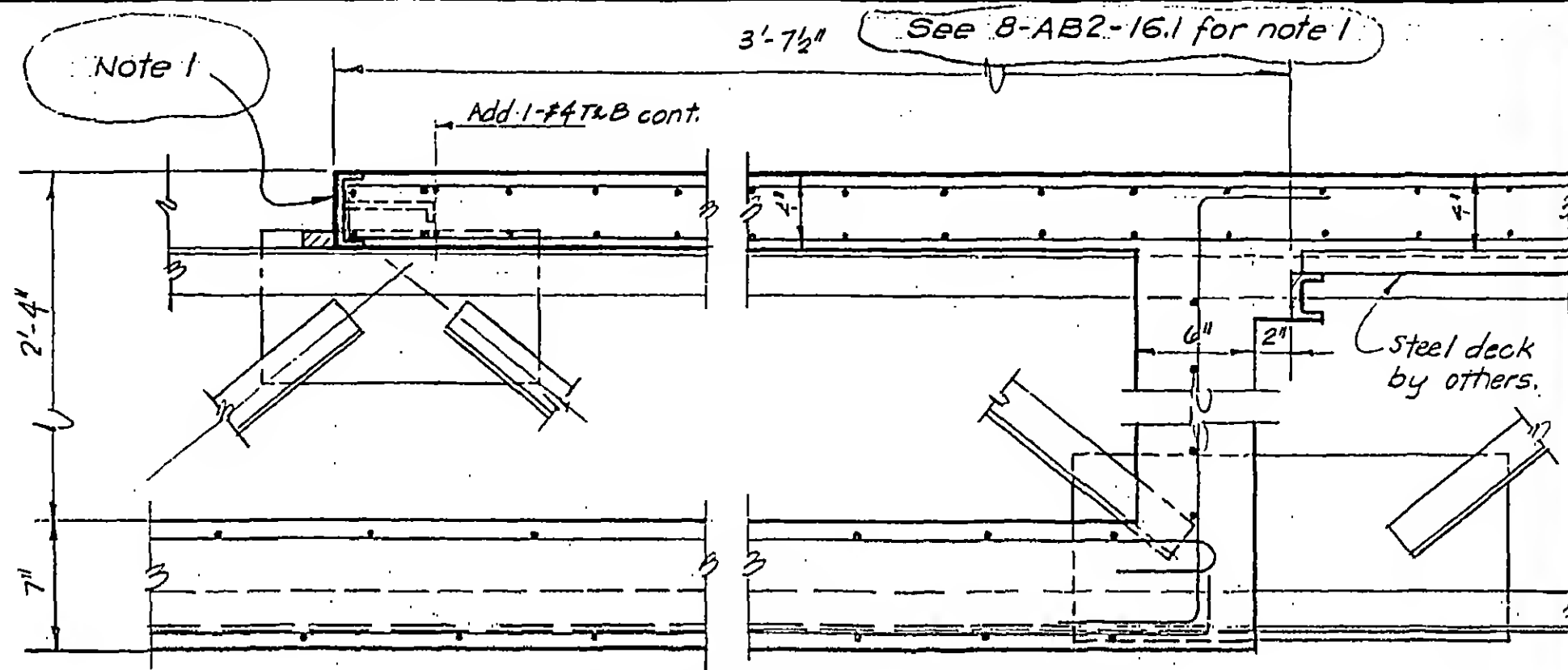
PROJECT THE WORLD TRADE CENTER

TITLE DETAILS AT SPLICING CHAMBER

DATE 3/19/70

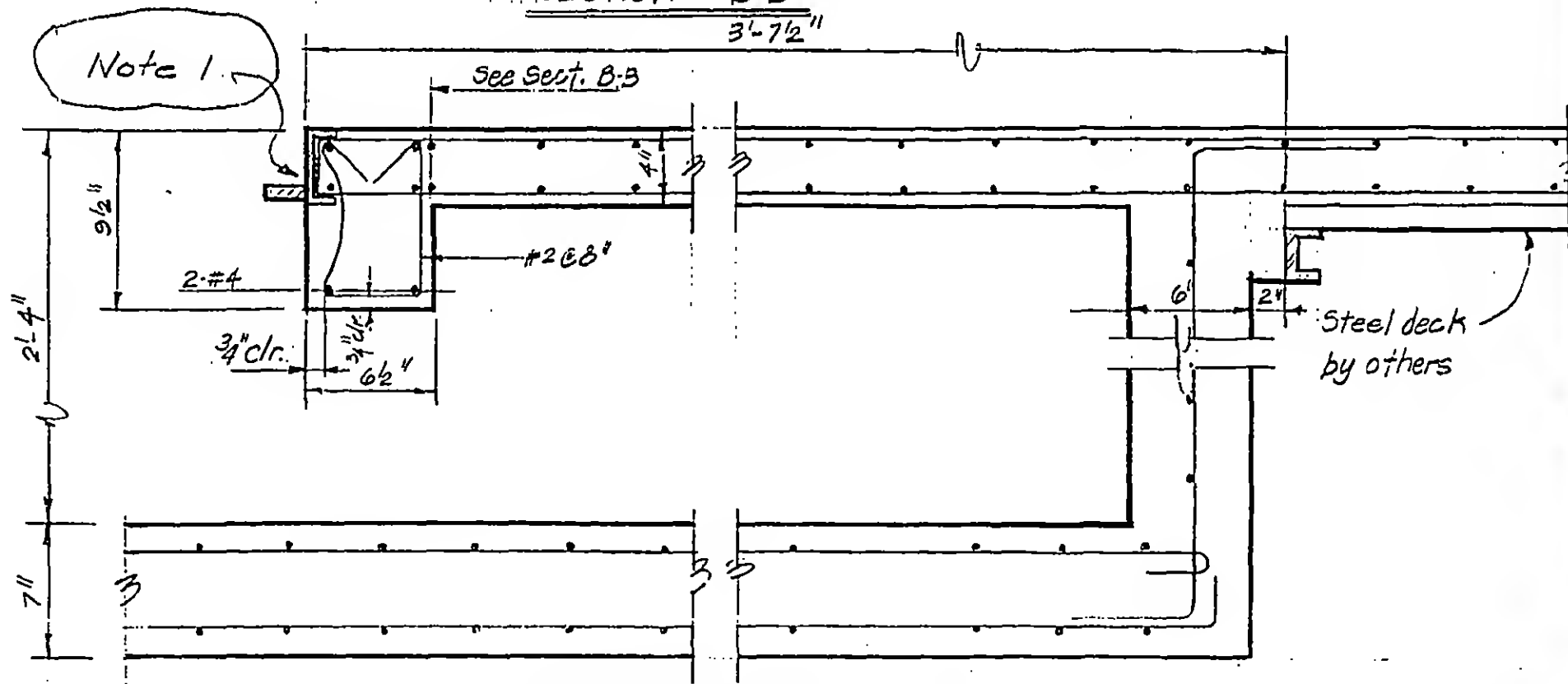
REVISIONS

5/22/70



SECTION B-B

3'-7 1/2"



SECTION C-C

8-AB2-16.2



DESIGNED

T. O'Neill

DRAWN

P. Ozeki

REVIEWED

SKILLING, HELLE. CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

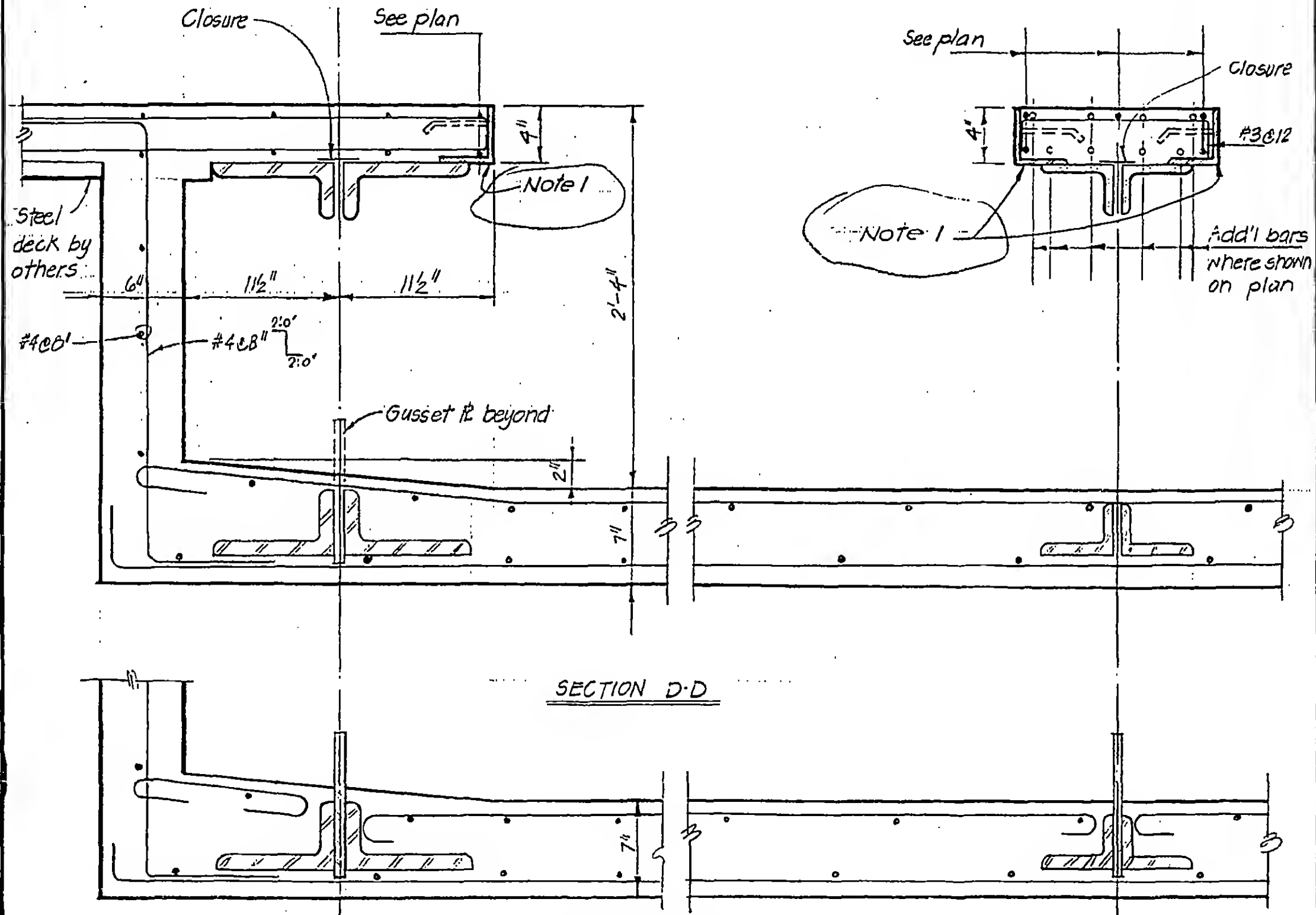
TITLE DETAILS AT SPLICING CHAMBER

DATE 3/19/70

REVISIONS

5/22/70

See 8-AB2-16.1 for note 1

DESIGNED  
T. O'NeillDRAWN  
P.M. Ozeki

REVIEWED

8AB-2-16.3

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

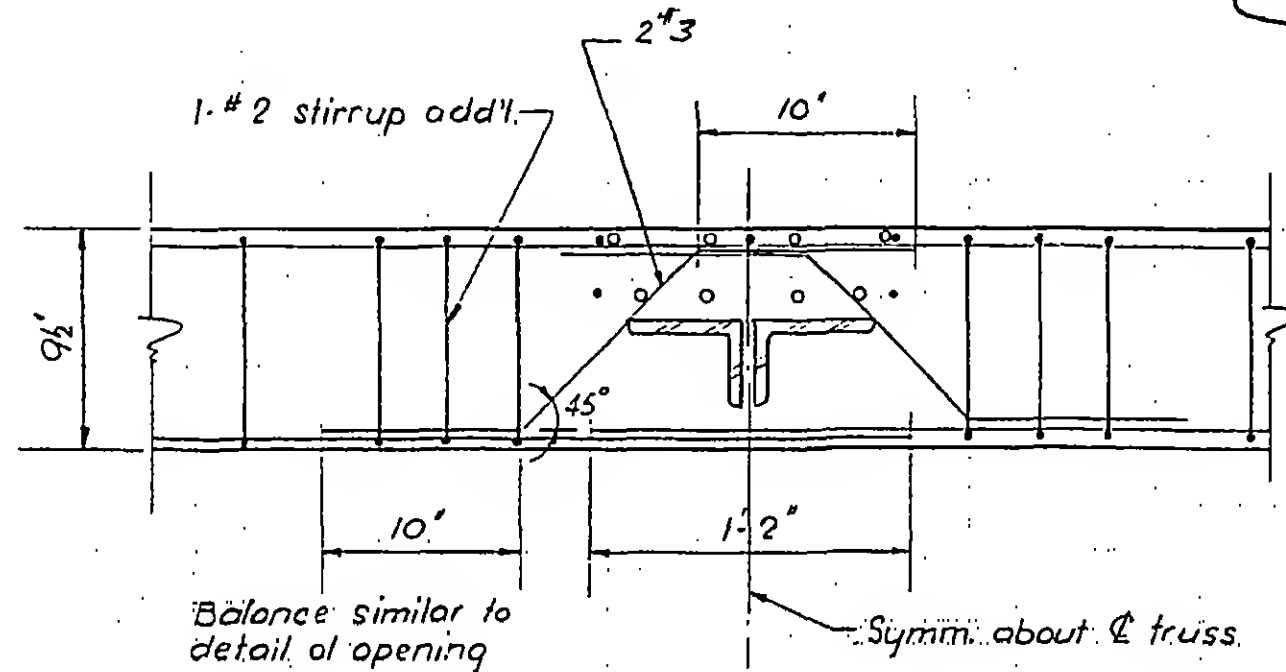
TITLE DETAILS AT SPLICING CHAMBER

DATE 3-19-70

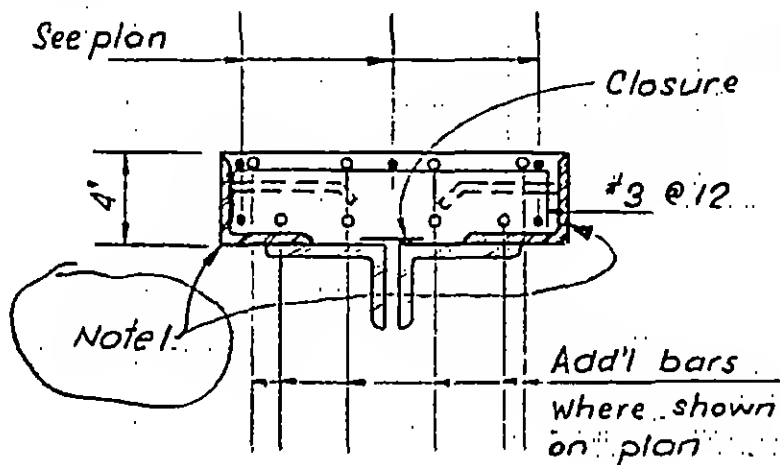
REVISIONS

5/22/70

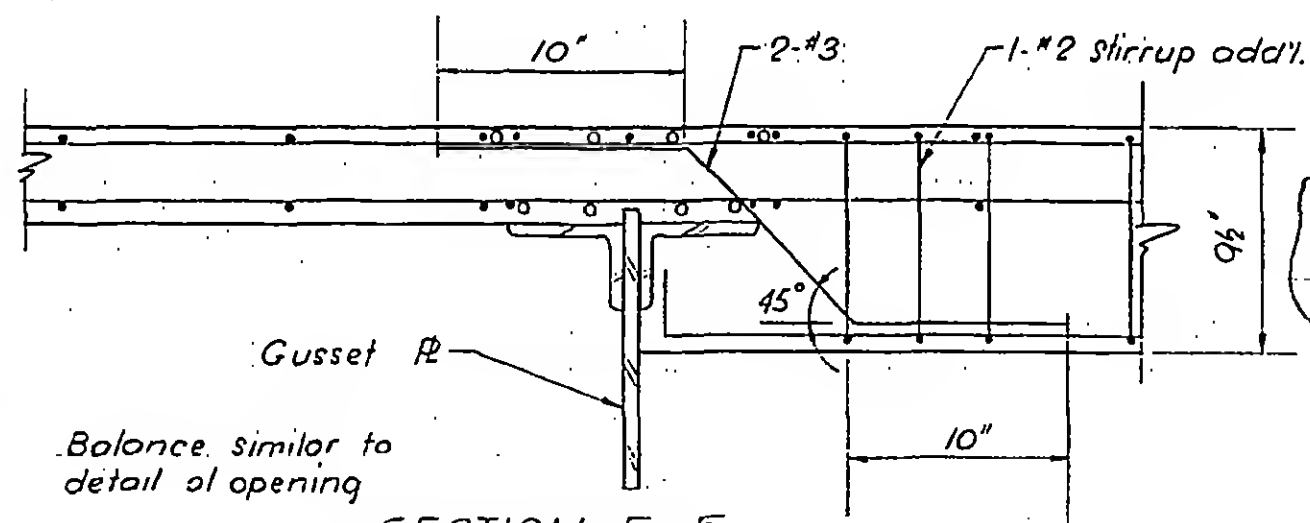
See 8-AB2-16.1 For note 1.

SECTION E-E

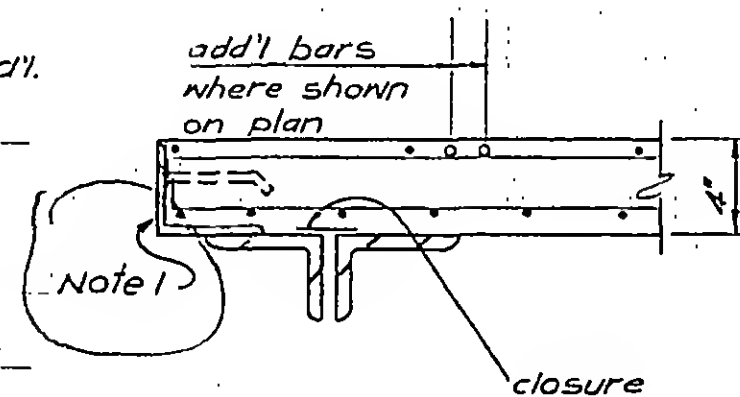
At continuous concrete beams

SECTION G-G

At openings.

SECTION F-F

At discontinuous concrete beams.

SECTION H-H

At openings

DESIGNED  
T. O'NeillDRAWN  
T. Terrelonge

REVIEWED

8-AB2-16.4

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

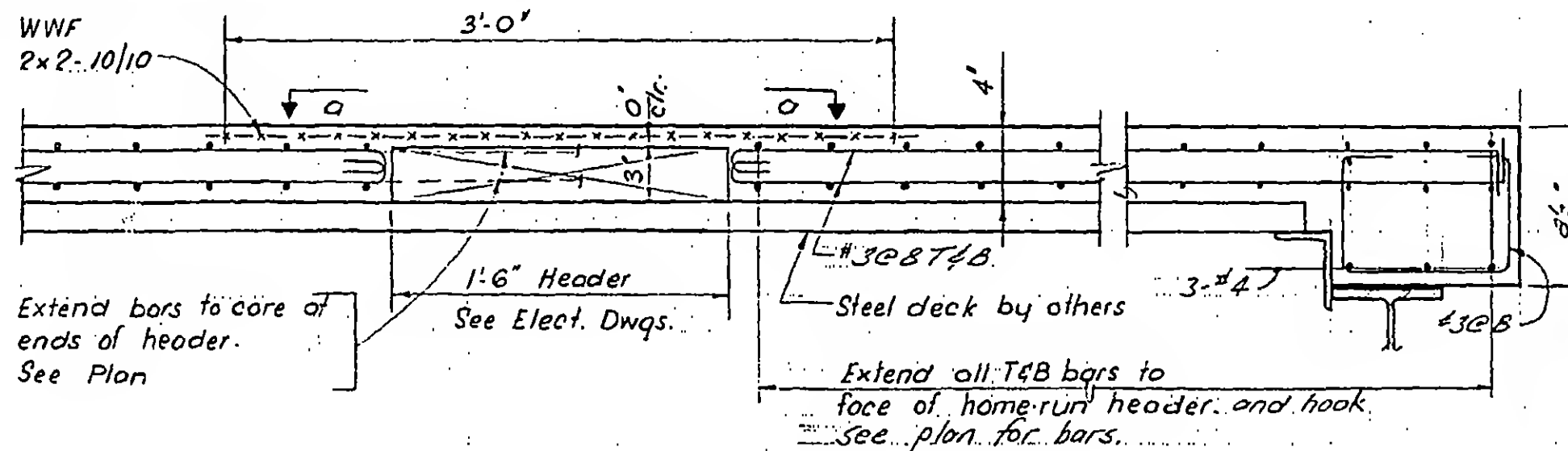
Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER

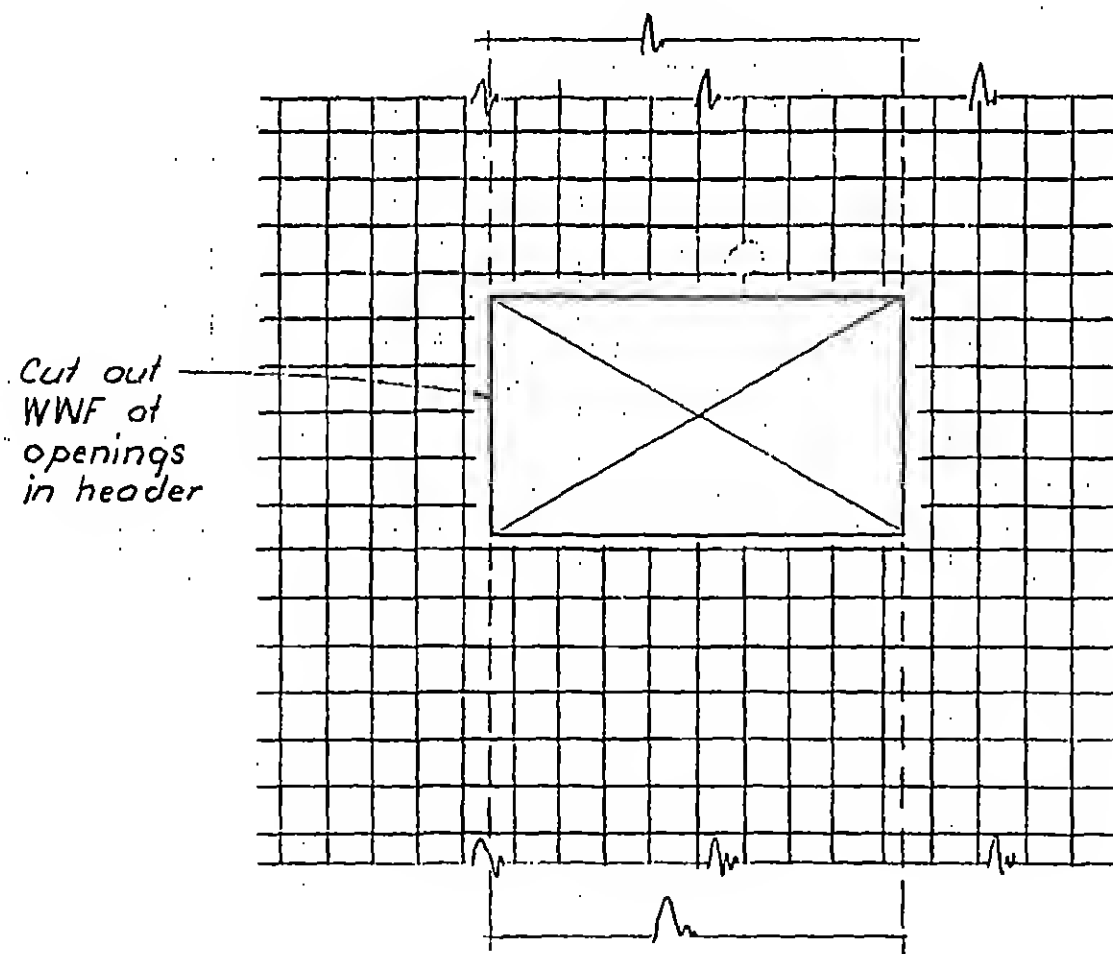
TITLE TYPICAL DETAIL OF 3" HEADER IN 4" SLAB

DATE 3-19-70

REVISIONS



SECTION A-A



Plan a-a  
Showing WWF over header

Note:-

Detail of WWF over home-run headers similar. Use 2'-6" width of 9" headers. See plan and electrical drawings.



DESIGNED  
T. O'Neill

DRAWN  
T. Terrelonge

REVIEWED

8-AB2-18.1



SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

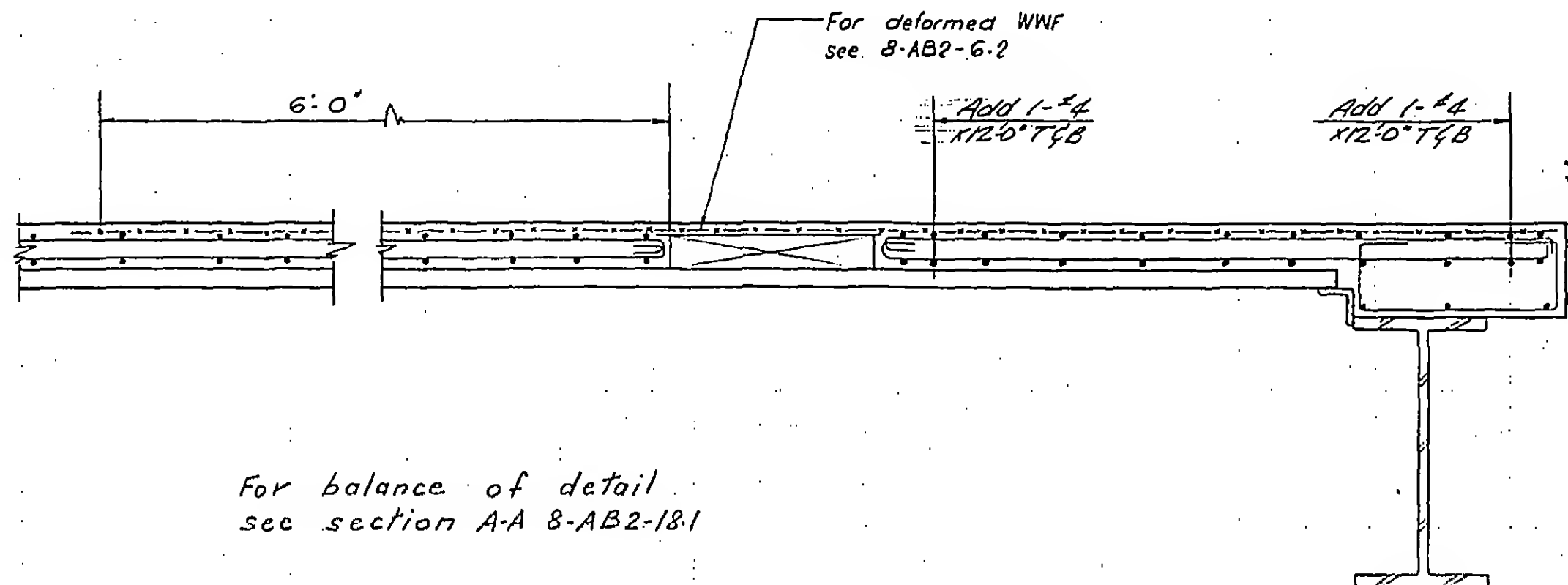
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL DETAIL OF 3" HEADER IN 4' SLAB

DATE 3-19-70

REVISIONS



For balance of detail  
see section A-A 8-AB2-18.1

SECTION B - B

Notes

1. Lap deformed WWF with 2x2- 10/10 WWF in adjacent bay 4' min. between end wires. Laps over header not permitted.



DESIGNED

T. O'Neill

DRAWN

T. Terrelonge

REVIEWED

8-AB2-18.2

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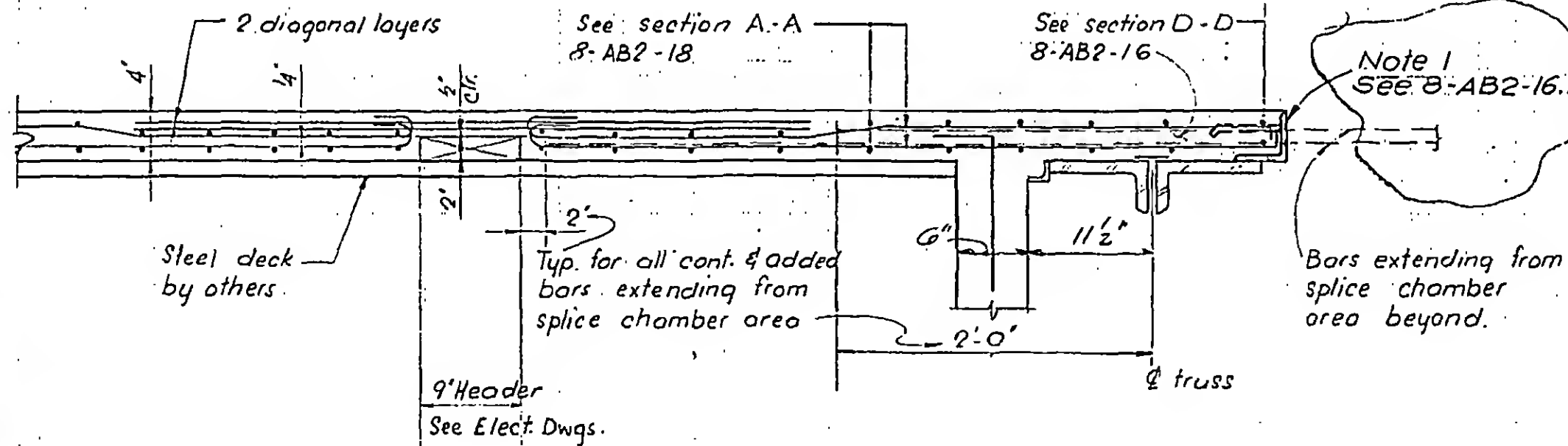
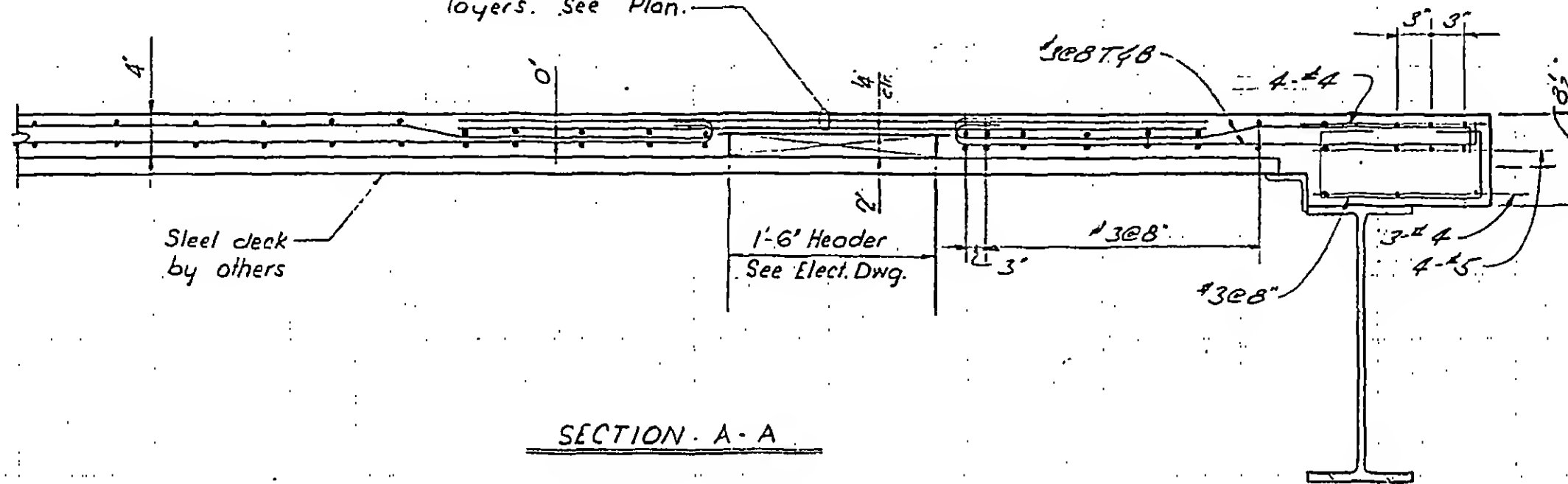
TITLE TYPICAL DETAIL OF 2" HEADER IN 4" SLAB

DATE 3-19-70

## REVISIONS

5/22/70

1 layer normal and  
1 diagonal or 2 diagonal  
layers. See Plan.



Note 1  
See 8-AB2-16.

Bars extending from  
splice chamber  
area beyond.

SECTION B-3

8-AB2-19



DESIGNED

*T. O'Neill*

**BRAWN**

*T. Terrelonge*

REVIEWED

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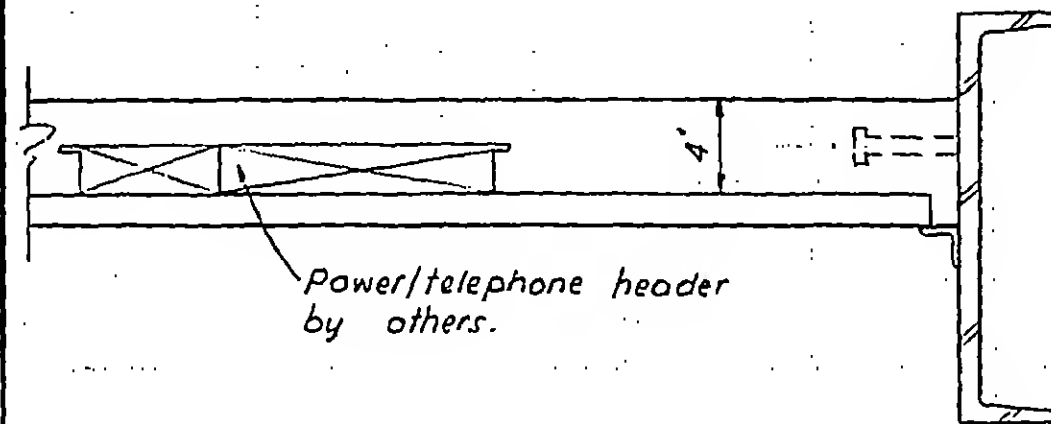
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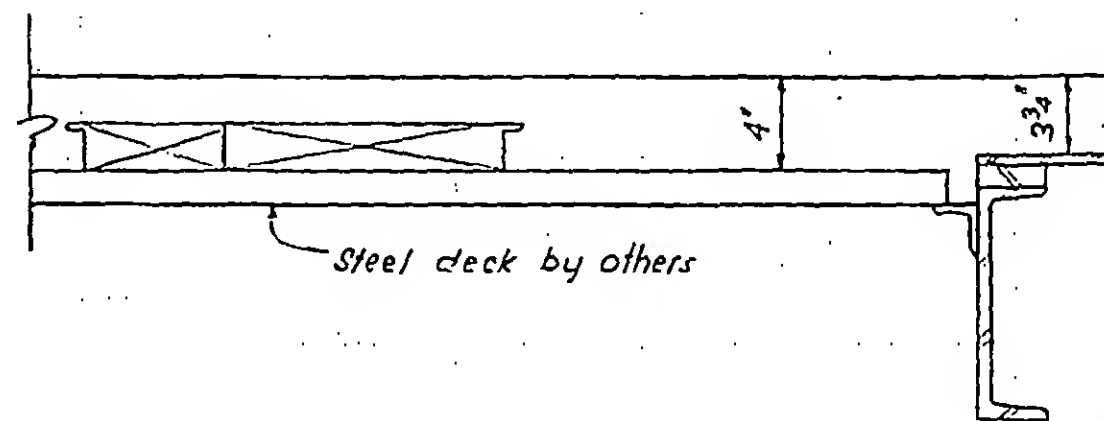
TITLE TYPICAL SECTIONS THRU CORE WALL

DATE 3-19-70

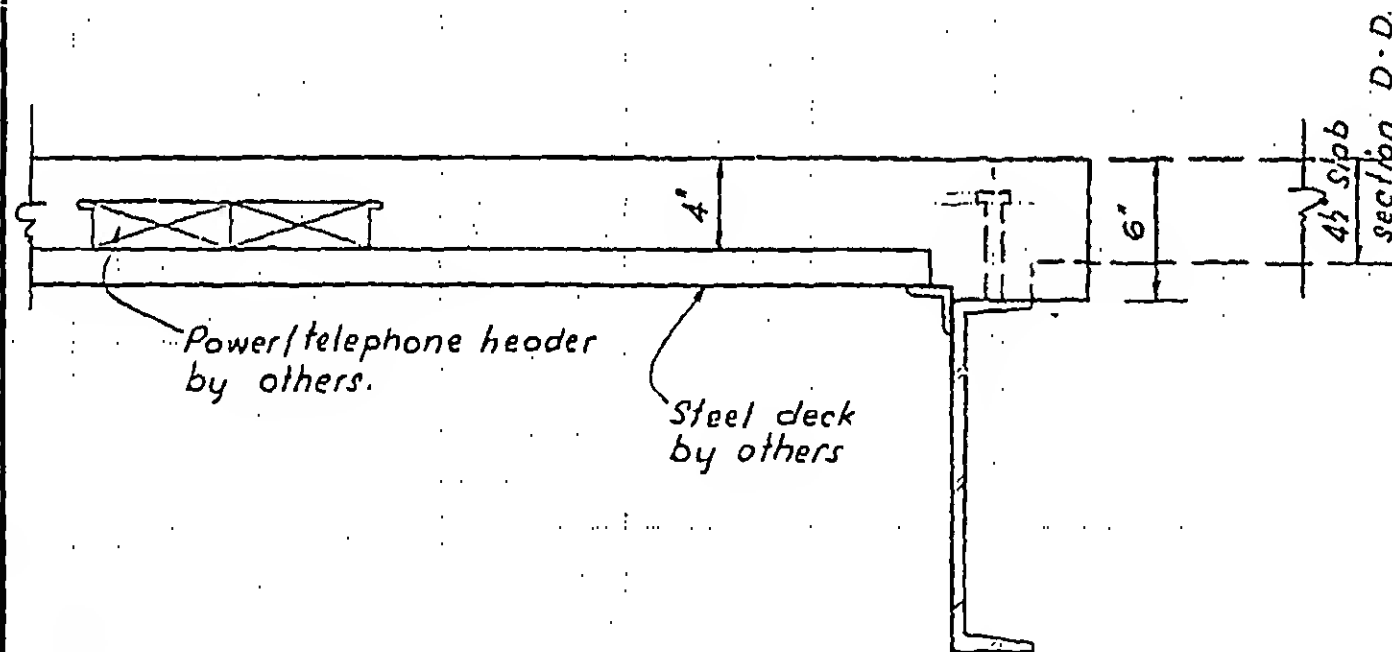
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SECTION A-A



SECTION B-B



SECTION C-C

SECTION D-D

Note: Reinf. not shown.



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DRAWN

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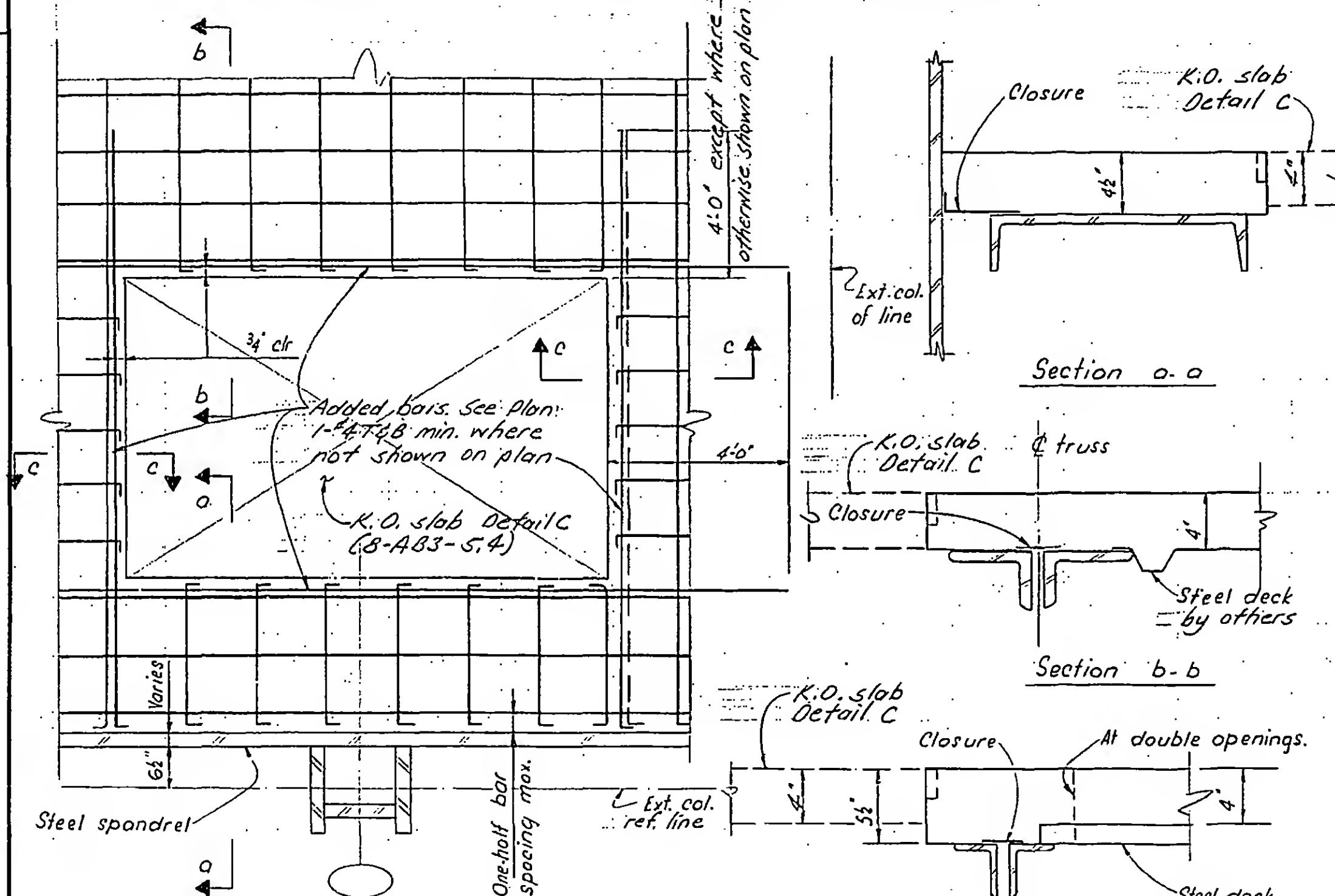
TITLE

DETAIL AT OPENINGS NEAR EXTERIOR WALL

DATE

3-19-70

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DETAIL A

DETAIL C as noted



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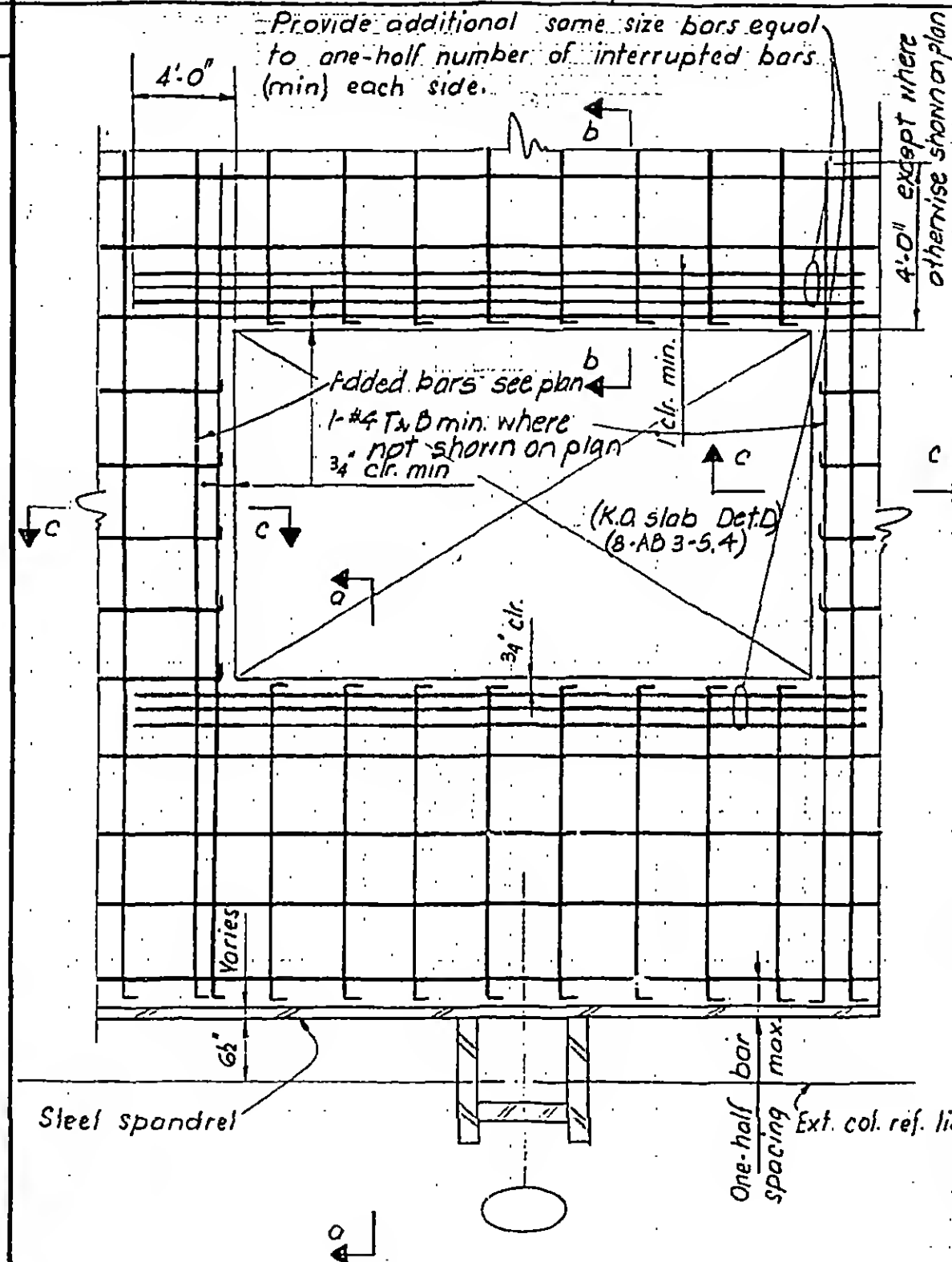
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PROJECT THE WORLD TRADE CENTER

TITLE DETAIL AT OPENINGS NEAR EXTERIOR WALL

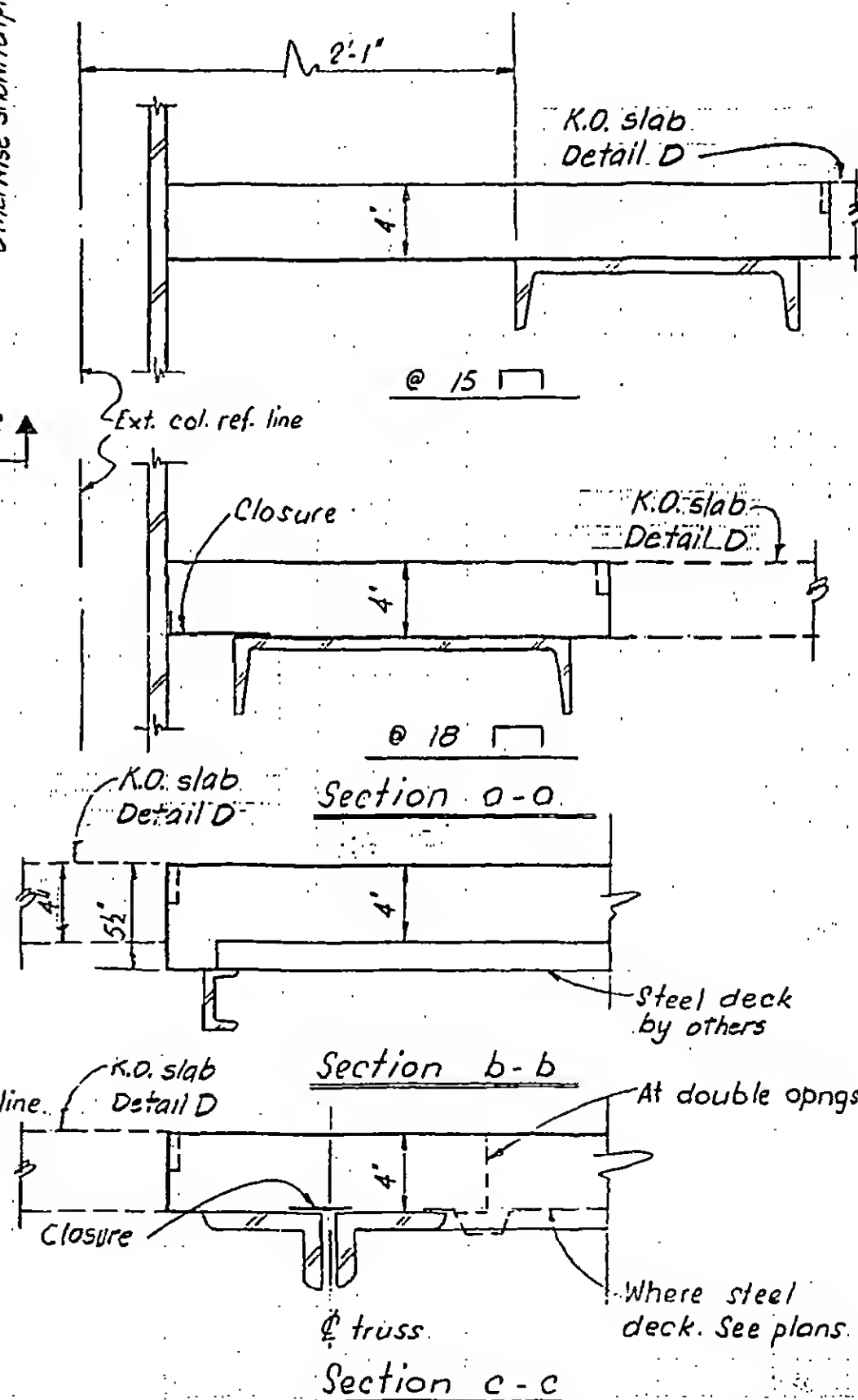
DATE 3/19/70

REVISIONS

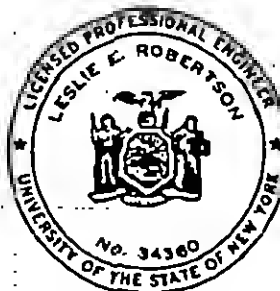


DETAIL B

DETAIL D is noted



8-AB2-21.2

DESIGNED  
T. O'NeillDRAWN  
T. Terrelange

REVIEWED

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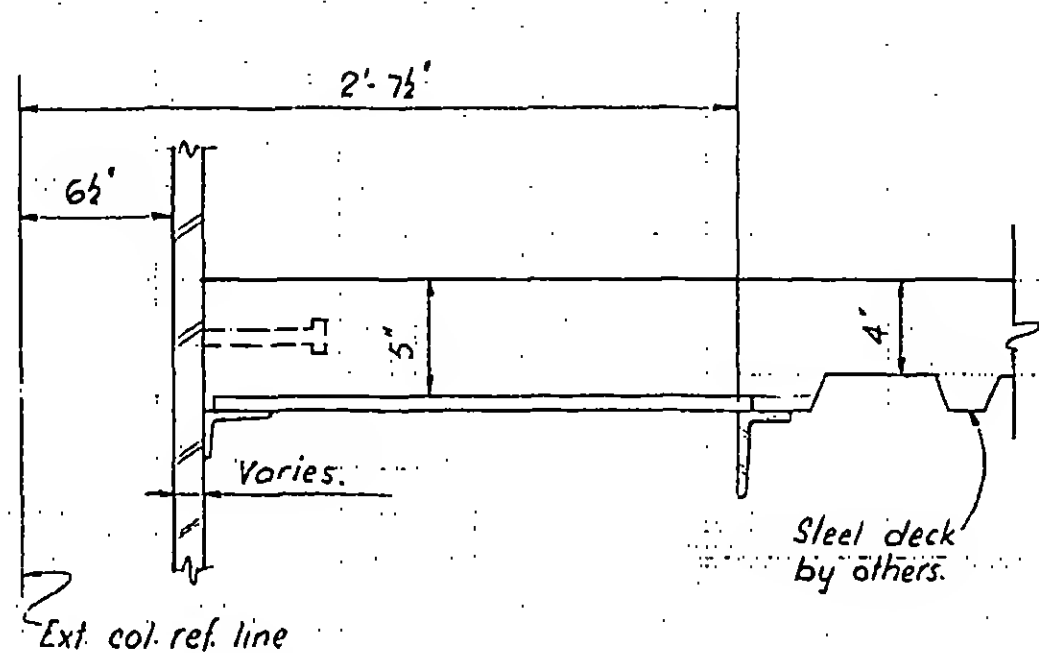
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PROJECT THE WORLD TRADE CENTER

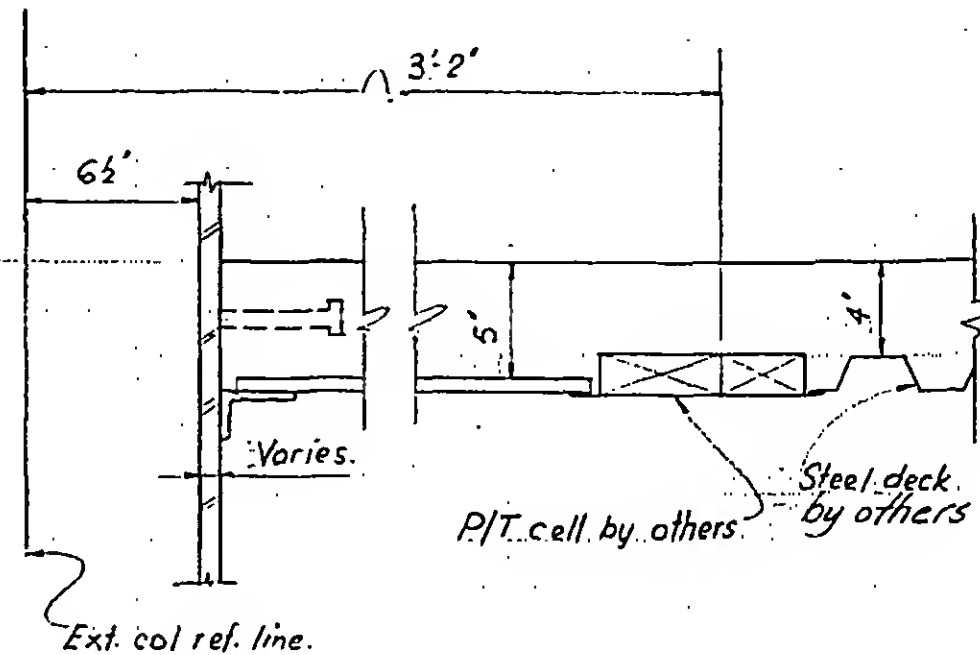
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DATE 3-19-70

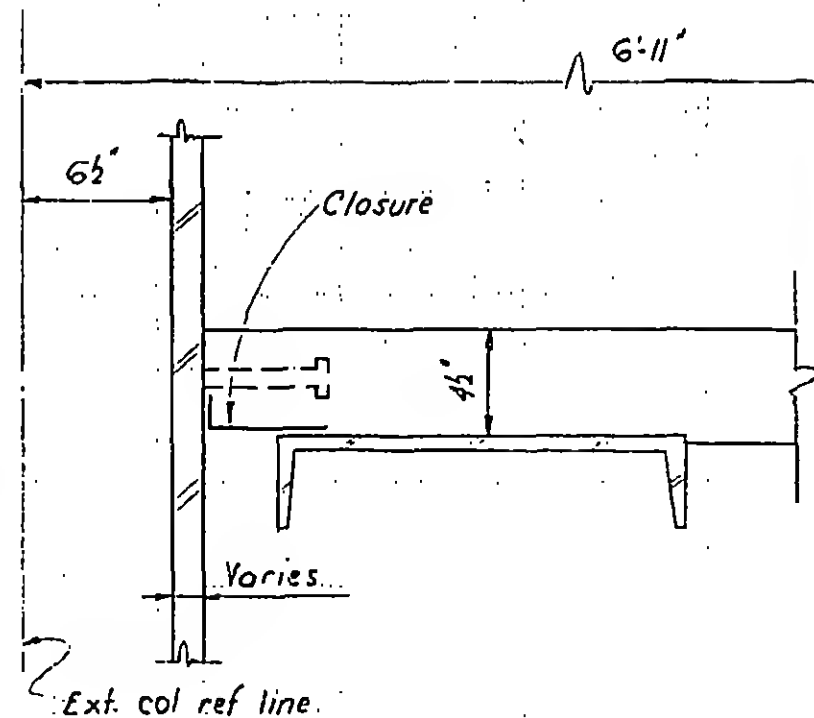
## REVISIONS



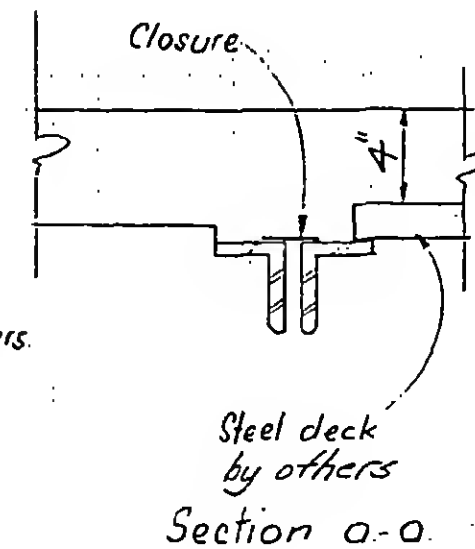
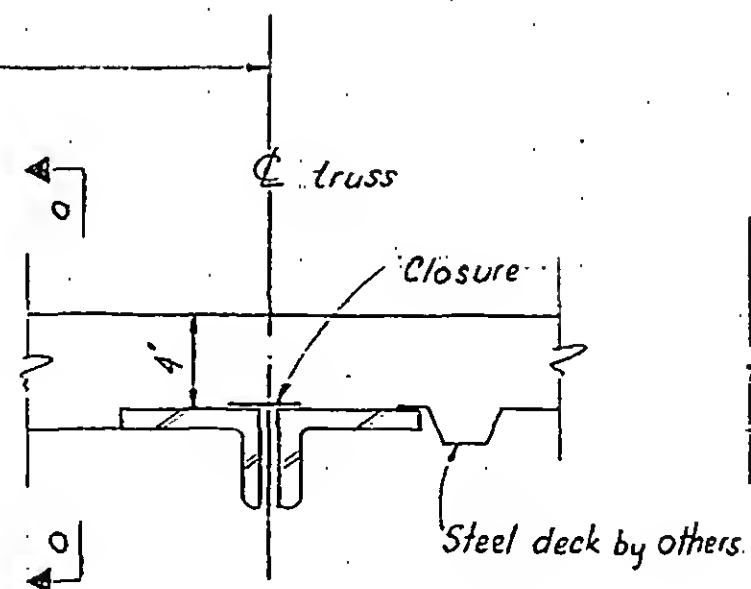
Section A-A.



Section A1-A1.



Section B-B.



Section a-a.

Note: Reinf. not shown.

8-AB2-22.1



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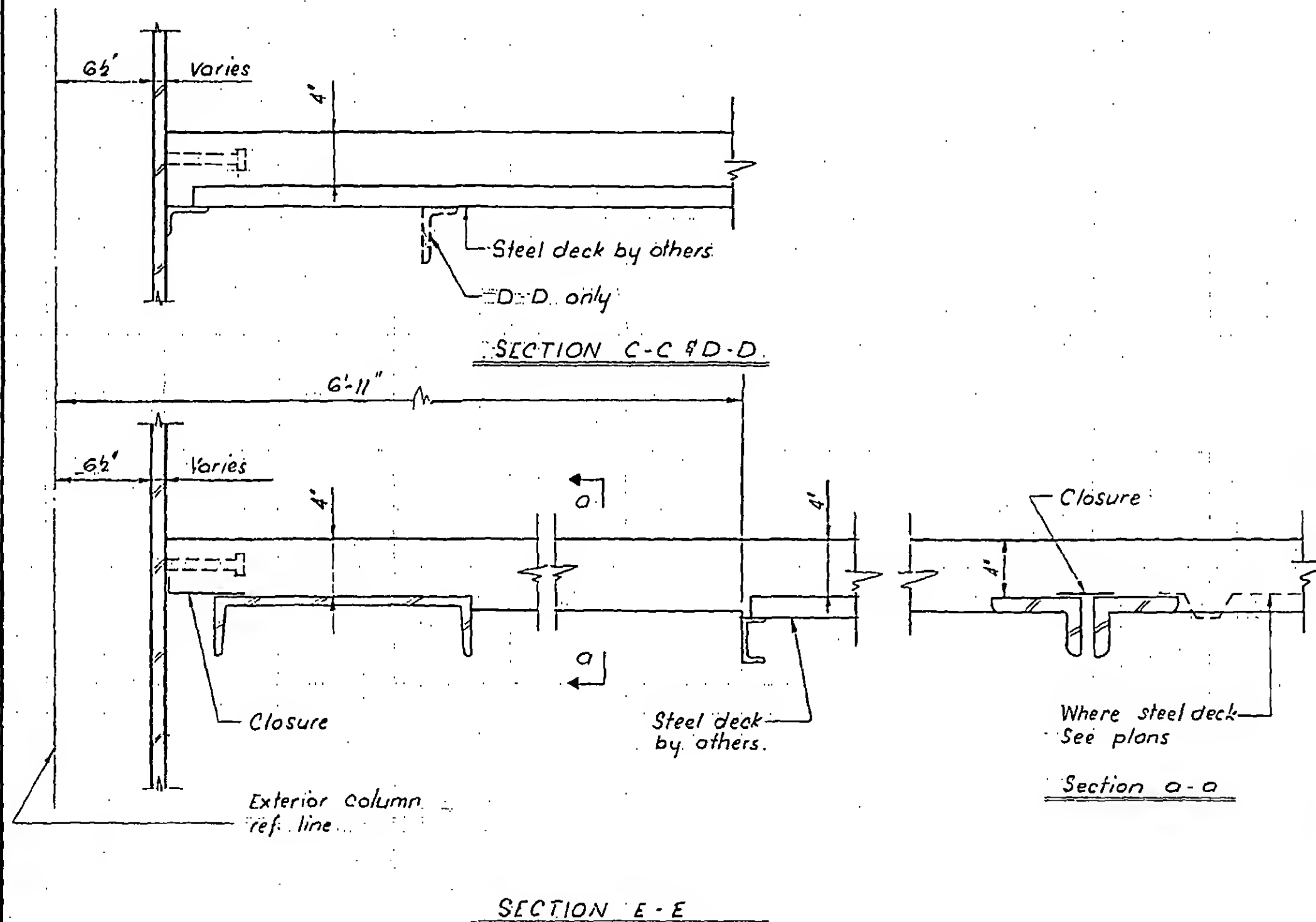
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TITLE TYPICAL SECTIONS THRU EXTERIOR WALL

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DRAWN

T. Terrelonge

REVIEWED

8-AR2-2000

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**ПРОЕКТ**

THE WORLD TRADE CENTER

**TITLE**

PART PLAN AT SPLICING CHAMBER

DATE \_\_\_\_\_

3-19-70

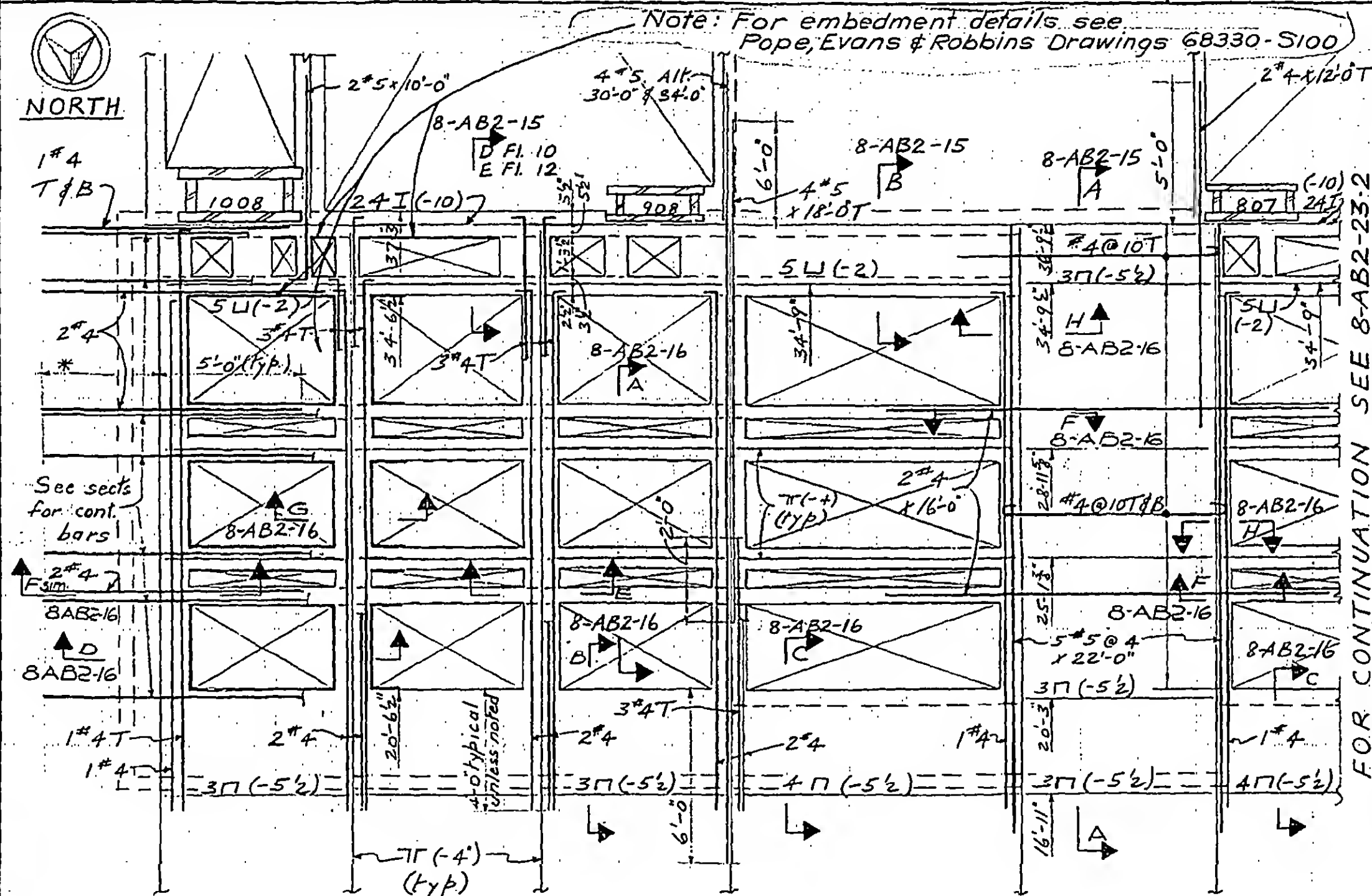
## REVISIONS

5/22/70



NORTH

1<sup>st</sup> 4  
T & B -



FOR CONTINUATION SEE 8-AB2-23.2

Note: For location of openings see Floor Plans - SCB-22 for Floor 10 and SCB-26 for Floor 12.

PART PLAN SPLICE CHAMBER AREA

\* Use 4'-0" typical floor 10. See section BB 8-AB2-19 for floor 12.

Scale :  $4'' = 1'-0''$

8-AB2-23.1



DESIGNED  
T. O'Neill

DRAWN  
T. T. & T. O'N.

## REVIEWER



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TITLE PART PLAN AT SPLICE CHAMBER

DATE 3-19-70

## REVISIONS

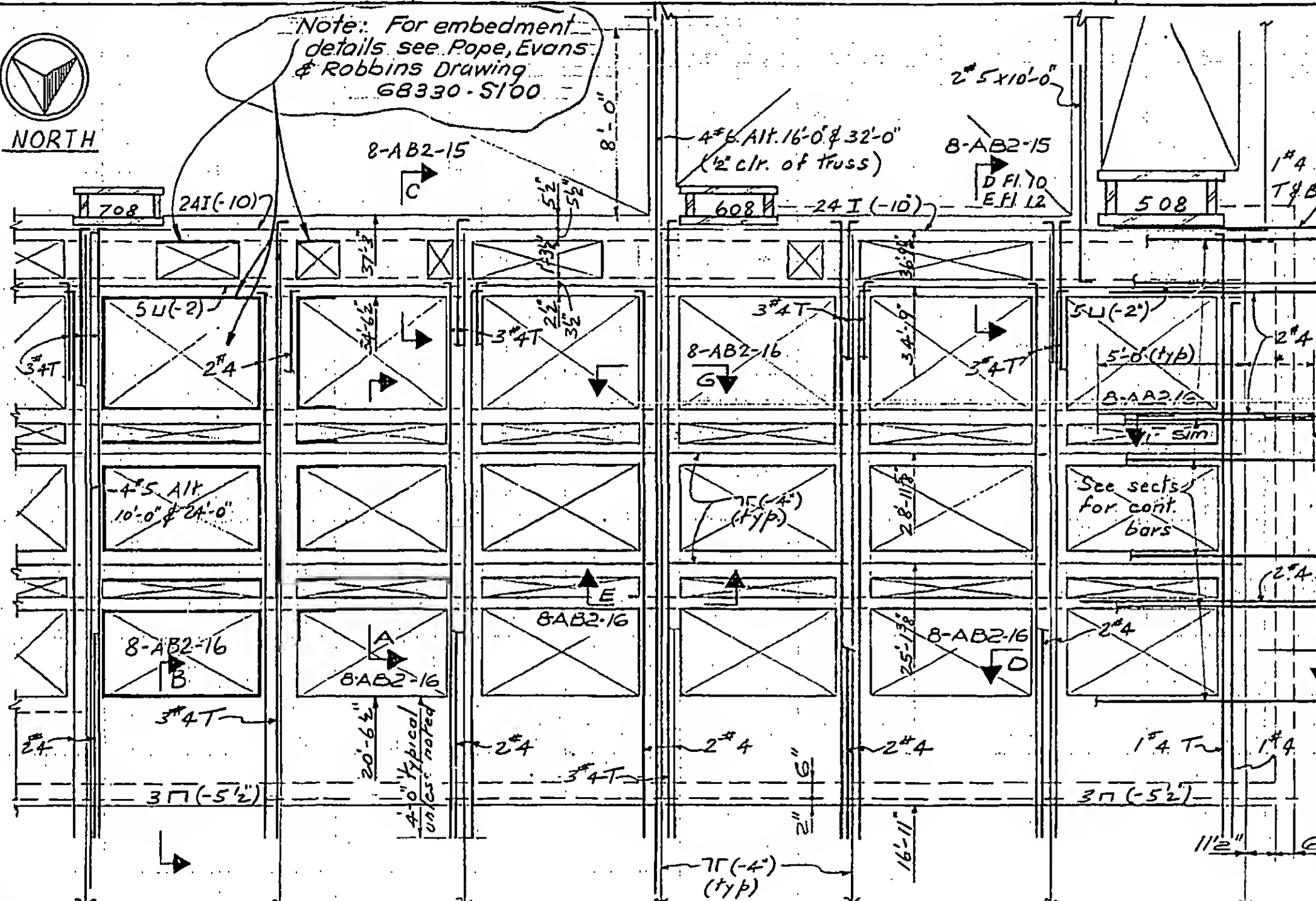
5/22/70



NORTH

Note: For embedment details see Pope, Evans & Robbins Drawing 68330-S100

FOR CONTINUATION SEE 8-AB2-23-1



Note : For location of openings see Floor Plans—SCB-22 for Floor 10 and SCB26 for Floor 12

PART PLAN SPLICE CHAMBER AREA

\* Use 4'-0" typical floor 10. See section B-B 8-AB2-19 for floor 12

Scale : 4" = 1'-0"

8-AB2-23.2



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T. O'Neill

DRAWN  
T. T. ETON

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SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

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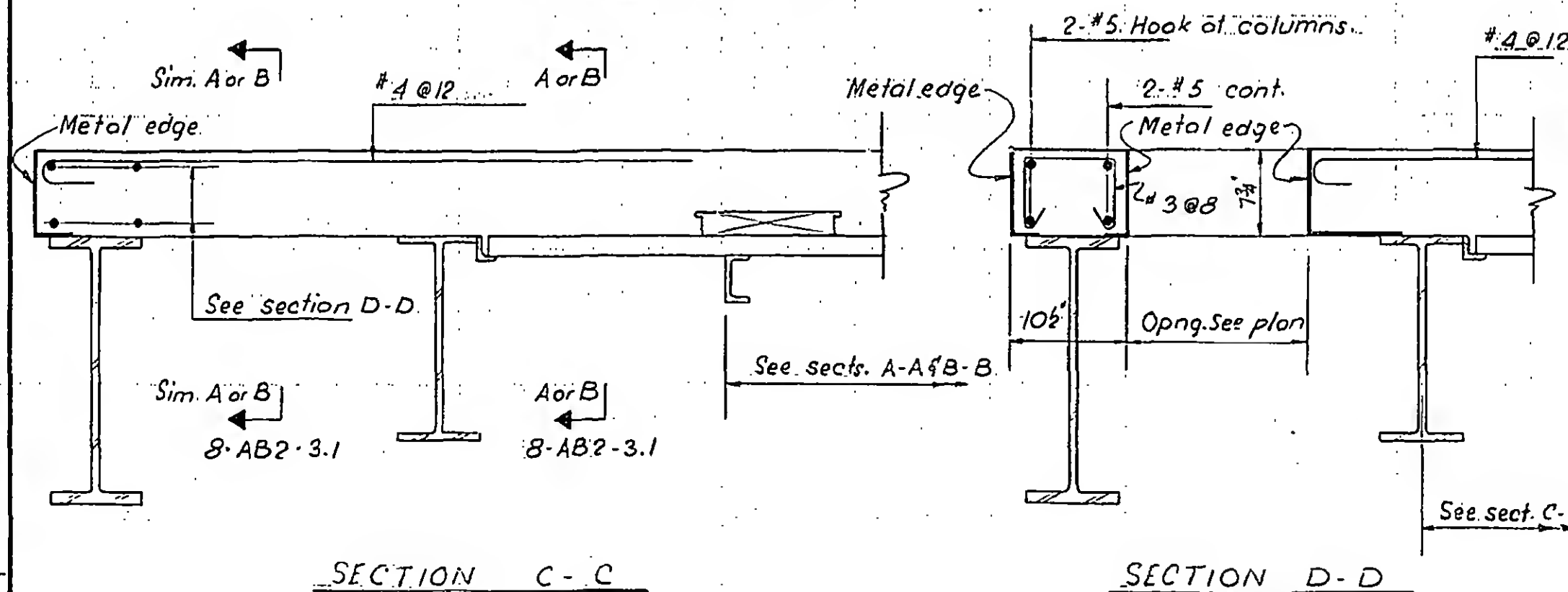
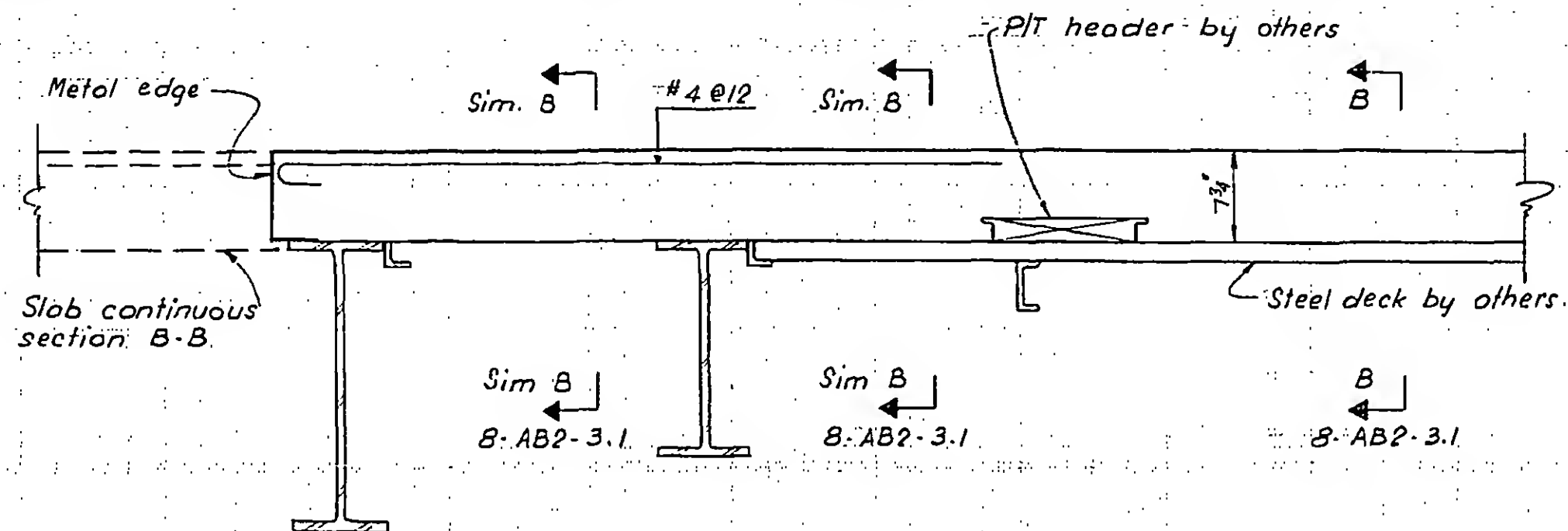
TITLE

TYPICAL SECTIONS THRU CORE WALL

DATE

3-16-70

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Note: For reinf. not shown see plans, 8-AB2-3.1 &amp; 8-AB2-7.

8-AB2-24



DESIGNED

T. O'Neill

DRAWN

T. Terrelonge

REVIEWED

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

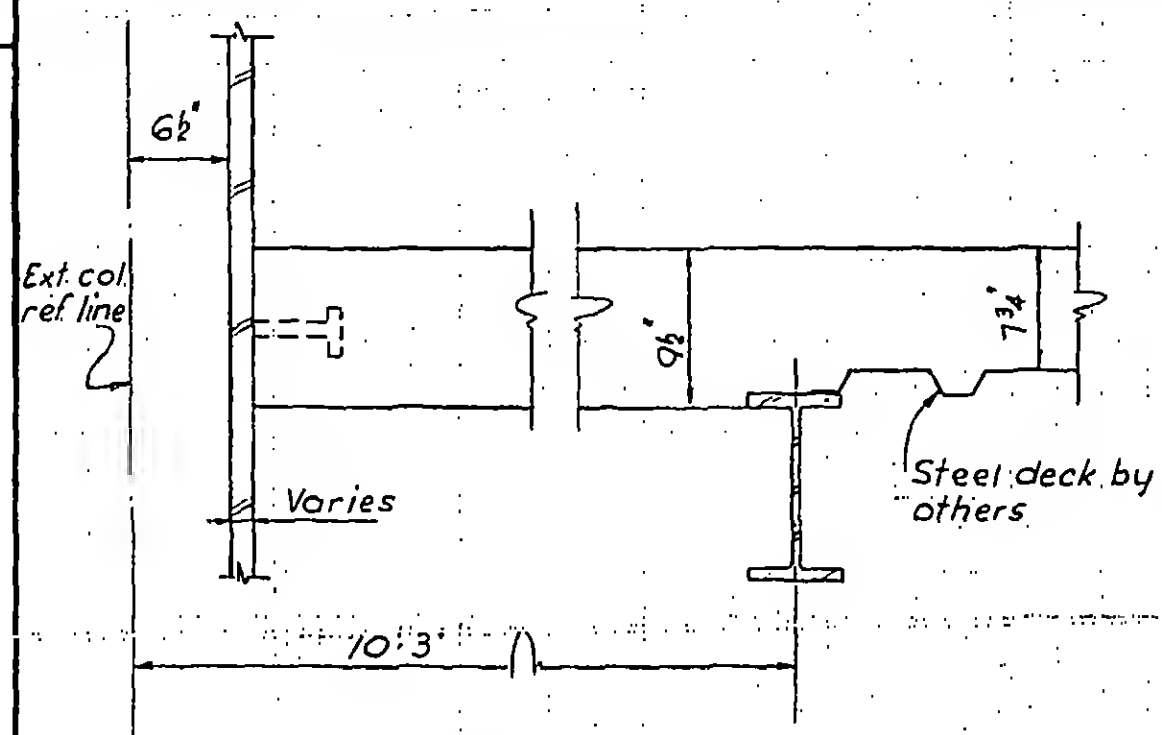
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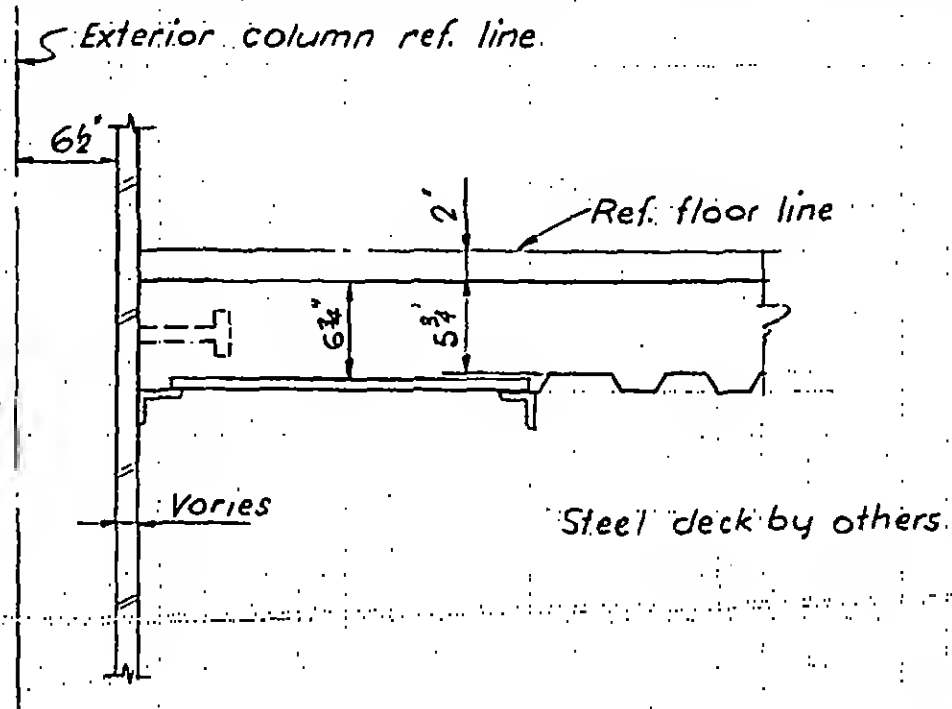
TITLE TYPICAL SECTIONS THRU EXTERIOR WALL

DATE 3-16-70

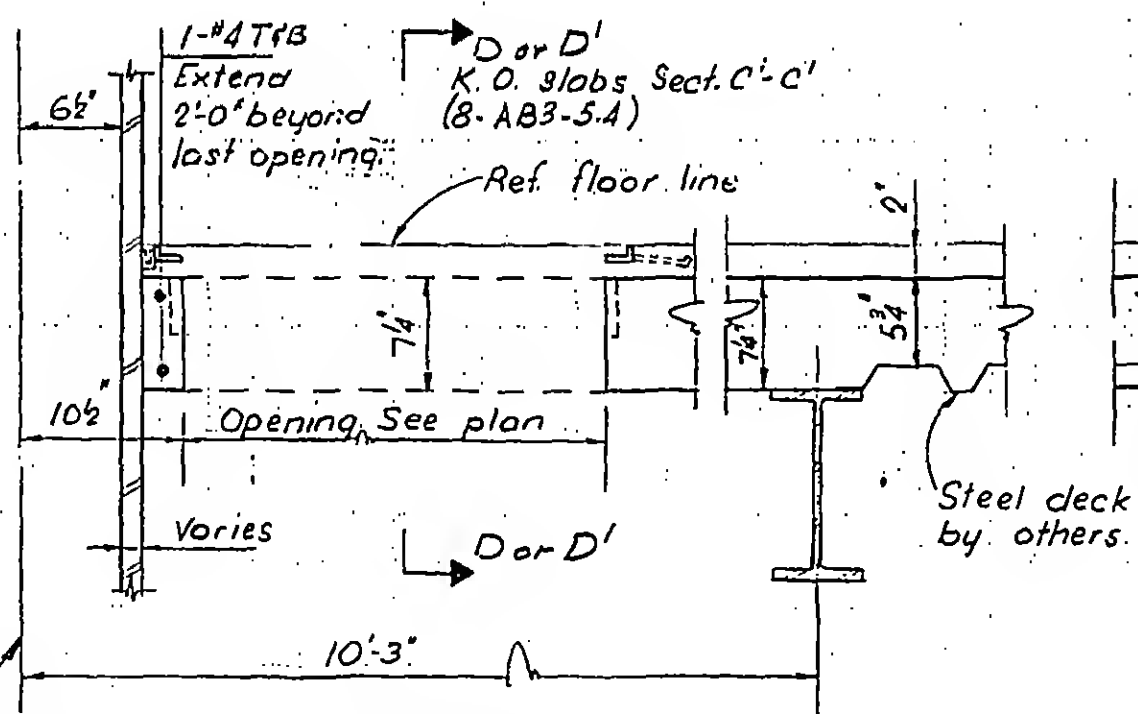
REVISIONS



SECTION A-A

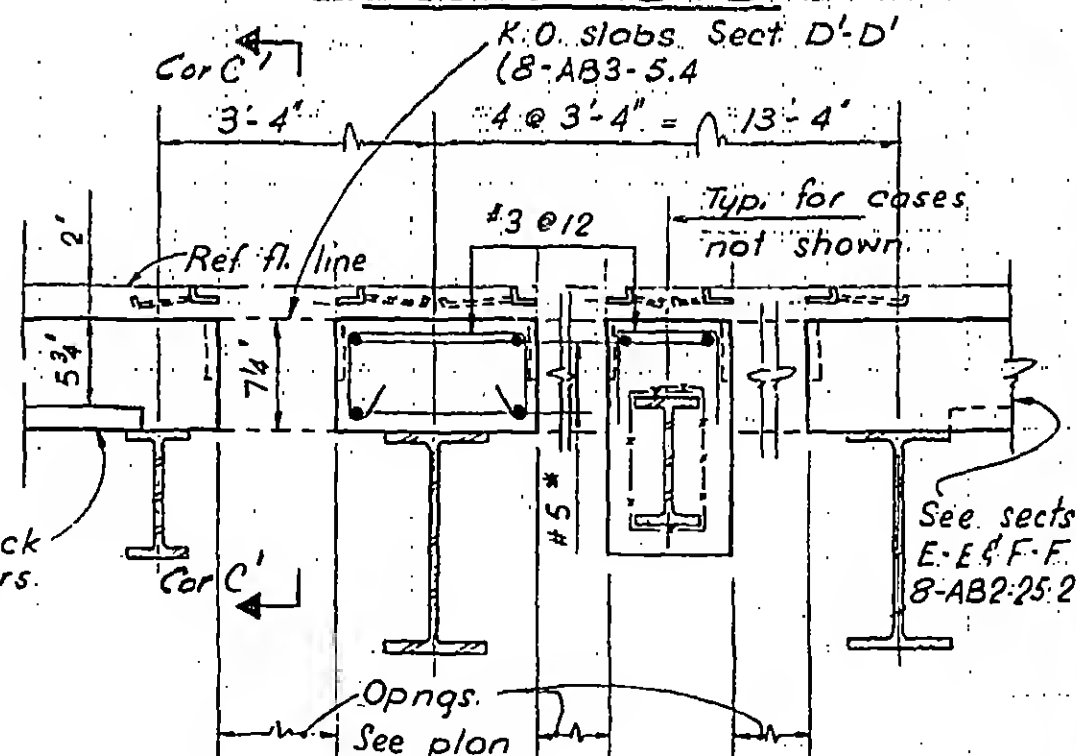


SECTION B-B



SECTION C-C

SECTION C'-C' as noted.



SECTION D-D

SECTION D'-D' as noted

Note: For reinf. not shown see plans.

\* Hook at ext. wall and extend 4'-0" past opening.

8-AB2-25.1

DESIGNED  
T. O'NeillDRAWN  
T. Terrelonge

REVIEWED

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

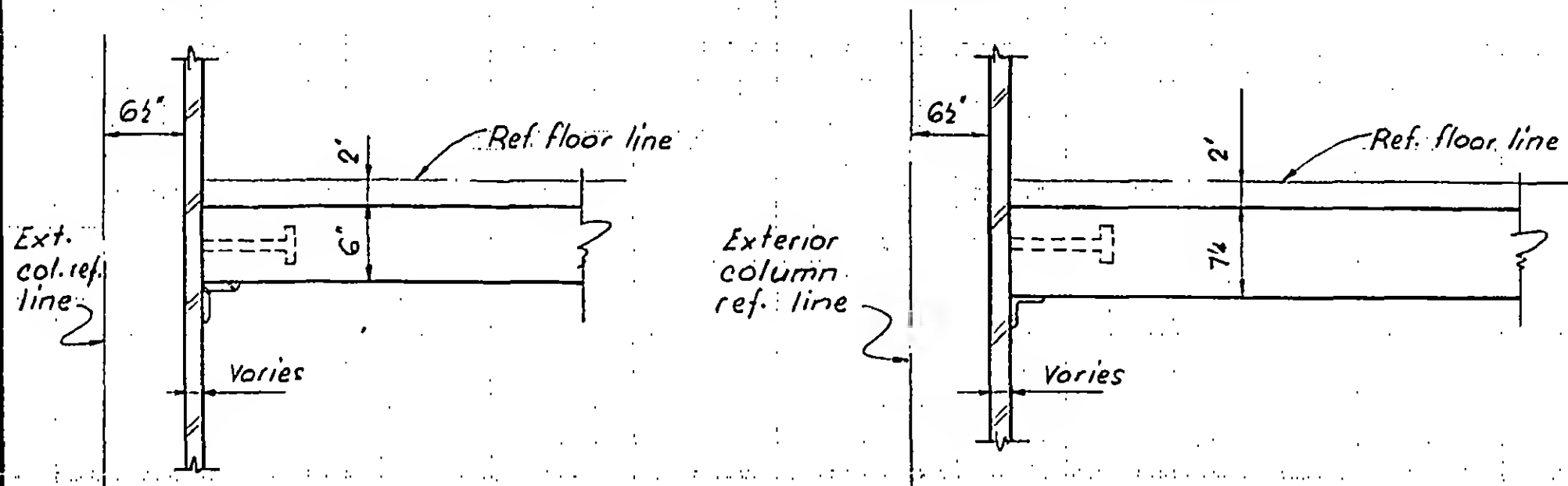
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TITLE TYPICAL SECTIONS THRU EXTERIOR WALL

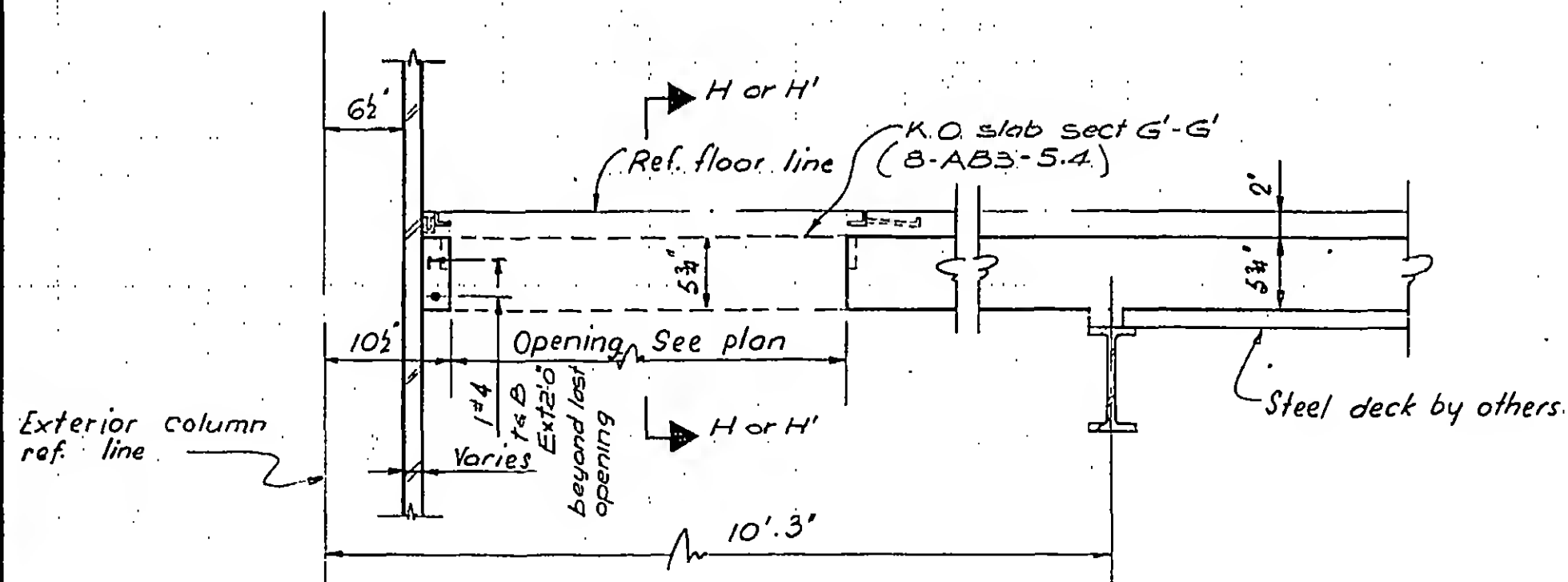
DATE 3-16-70

## REVISIONS



SECTION E - E

SECTION F - F

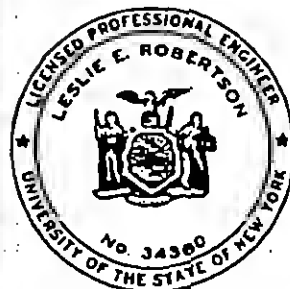


SECTION G - G

SECTION G'-G' as noted

Note: For reinf. not shown see plans.

8-AB2-25.2



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T. Terrelonge

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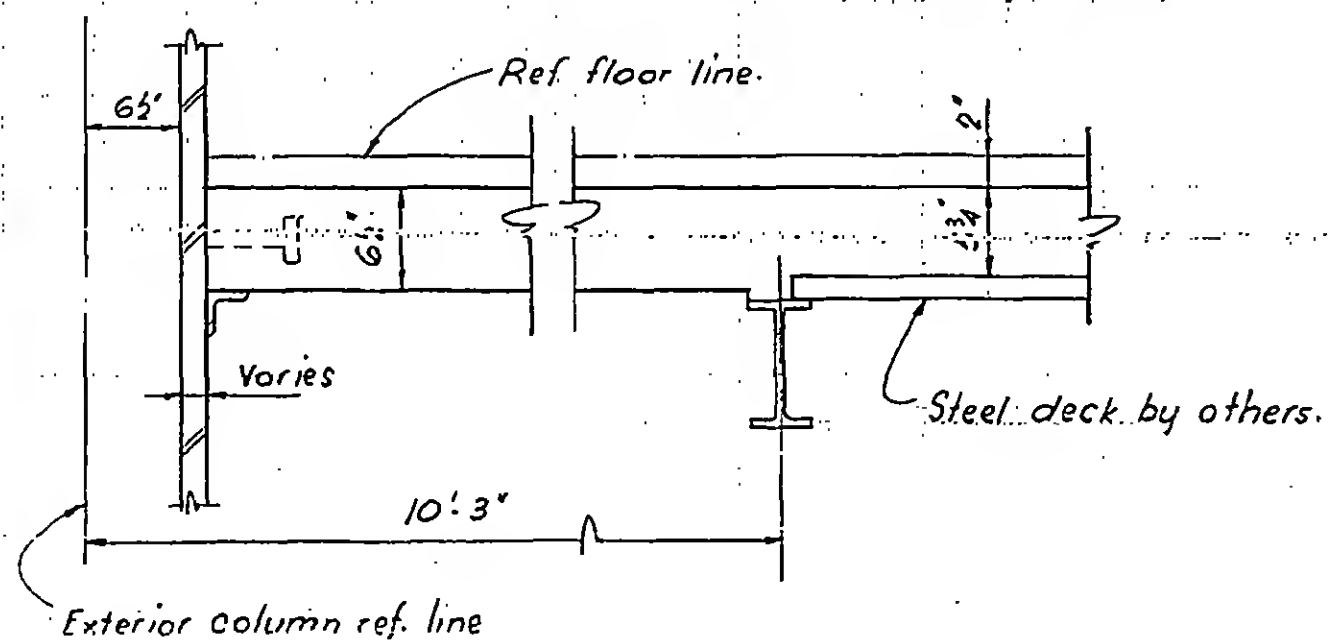
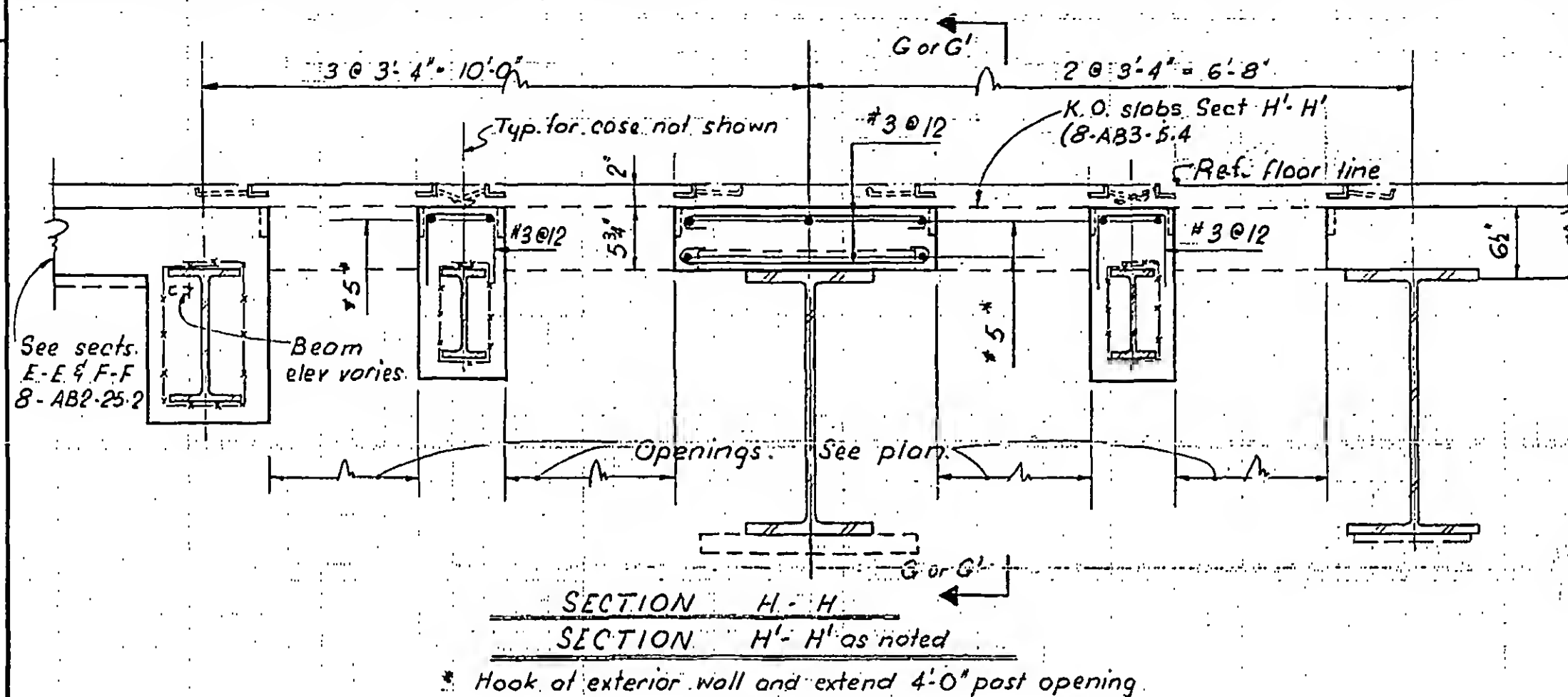
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TITLE TYPICAL SECTIONS THRU EXTERIOR WALL

DATE 3-16-70

## REVISIONS



## SECTION K-K

Note: For reinf. not shown see plans.

8-AB2-25.3



DESIGNED

T. O'Neill

DRAWN

T. Terrelonge

REVIEWED

8-AB2-25.3

1-1062-LEA